GenCore version 5.1.6

OM nucleic - protein search, using frame_plus_n2p model

Run on: February 25, 2004, 01:27:07 ; Search time 17 Seconds
(without alignments)
2095.407 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 115
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: OLIGO
Xgapop 60.0 , Xgapext 60.0
Ygapop 60.0 , Ygapext 60.0
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 389414 seqs, 51625971 residues

Word size: 1

Total number of hits satisfying chosen parameters: 663654

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Command line parameters:
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-DB=Issued_Patents_AA -QFMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=oligo -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=quality -THR_MIN=1 -ALIGN=15 -MODE=LOCAL
-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US09873224_@CGN_1_1_27_@runat_24022004_132746_10614 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELOP=6 -DELEXT=7

Database : Issued_Patents_AA:*
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2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	98	85.2	115	3	US-08-836-075A-50	Sequence 50, Appl
2	83	72.2	100	4	US-08-635-886C-233	Sequence 233, App
3	83	72.2	100	4	US-08-974-690C-233	Sequence 233, App
4	44	38.3	124	1	US-08-244-116B-15	Sequence 15, Appl
5	44	38.3	191	2	US-08-290-665A-187	Sequence 187, App
6	44	38.3	191	2	US-08-290-665A-188	Sequence 188, App
7	44	38.3	191	2	US-08-290-665A-189	Sequence 189, App
8	44	38.3	191	2	US-08-290-665A-190	Sequence 190, App
9	44	38.3	191	2	US-08-290-665A-191	Sequence 191, App
10	44	38.3	191	2	US-08-290-665A-192	Sequence 192, App
11	44	38.3	191	2	US-08-290-665A-193	Sequence 193, App
12	44	38.3	191	2	US-08-290-665A-195	Sequence 195, App
13	44	38.3	191	2	US-08-290-665A-196	Sequence 196, App
14	44	38.3	191	2	US-08-290-665A-197	Sequence 197, App
15	44	38.3	191	5	PCT-US95-10398-187	Sequence 187, App
16	44	38.3	191	5	PCT-US95-10398-188	Sequence 188, App
17	44	38.3	191	5	PCT-US95-10398-189	Sequence 189, App
18	44	38.3	191	5	PCT-US95-10398-190	Sequence 190, App
19	44	38.3	191	5	PCT-US95-10398-191	Sequence 191, App
20	44	38.3	191	5	PCT-US95-10398-192	Sequence 192, App
21	44	38.3	191	5	PCT-US95-10398-193	Sequence 193, App
22	44	38.3	191	5	PCT-US95-10398-195	Sequence 195, App
23	44	38.3	191	5	PCT-US95-10398-196	Sequence 196, App
24	44	38.3	191	5	PCT-US95-10398-197	Sequence 197, App
25	44	38.3	319	4	US-08-635-886C-217	Sequence 217, App
26	44	38.3	319	4	US-08-635-886C-219	Sequence 219, App
27	44	38.3	319	4	US-08-974-690C-217	Sequence 217, App
28	44	38.3	319	4	US-08-974-690C-219	Sequence 219, App
29	37	32.2	191	2	US-08-290-665A-194	Sequence 194, App
30	37	32.2	191	5	PCT-US95-10398-194	Sequence 194, App
31	34	29.6	42	3	US-08-380-160-10	Sequence 10, Appl
32	34	29.6	46	1	US-08-262-037-27	Sequence 27, Appl
33	34	29.6	56	1	US-08-262-037-28	Sequence 28, Appl
34	34	29.6	61	1	US-08-262-037-29	Sequence 29, Appl
35	34	29.6	89	1	US-07-681-703B-24	Sequence 24, Appl
36	34	29.6	89	2	US-08-407-410B-24	Sequence 24, Appl
37	34	29.6	89	2	US-08-485-500-24	Sequence 24, Appl
38	34	29.6	89	5	PCT-US91-02370-24	Sequence 24, Appl
39	34	29.6	119	1	US-07-681-703B-18	Sequence 18, Appl
40	34	29.6	119	2	US-08-407-410B-18	Sequence 18, Appl
41	34	29.6	119	2	US-08-485-500-18	Sequence 18, Appl
42	34	29.6	119	5	PCT-US91-02370-18	Sequence 18, Appl
43	34	29.6	120	4	US-08-850-328-2	Sequence 2, Appli
44	34	29.6	144	3	US-08-444-818-103	Sequence 103, App
45	34	29.6	150	1	US-07-681-703B-16	Sequence 16, Appl

ALIGNMENTS

RESULT 1
US-08-836-075A-50
; Sequence 50, Application US/08836075A
; Patent No. 6180768
; GENERAL INFORMATION:
; APPLICANT: MAERTENS, GEERT
; APPLICANT: STUYVER, LIEVEN
; TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
; TITLE OF INVENTION: AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
; TITLE OF INVENTION: AGENTS
; NUMBER OF SEQUENCES: 207
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ARNOLD, WHITE & DURKEE
; STREET: P.O. BOX 4433
; CITY: HOUSTON
; STATE: TEXAS
; COUNTRY: USA
; ZIP: 77210-4433
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Microsoft Word 6.0 / ASCII text output
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/836,075A
; FILING DATE: 21 Apr 1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/EP95/04155
; FILING DATE: 23 Oct 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 94870166.9
; FILING DATE: 21 Oct 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 95870076.7
; FILING DATE: 28 Jun 1995
; ATTORNEY/AGENT INFORMATION:

; NAME: KAMMERER, PATRICIA A.
; REGISTRATION NUMBER: 29,775
; REFERENCE/DOCKET NUMBER: INNS:004
; INFORMATION FOR SEQ ID NO: 50:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 115 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-836-075A-50

Alignment Scores:

Pred. No.:	5.09e-83	Length:	115
Score:	98.00	Matches:	98
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	85.22%	Indels:	0
DB:	3	Gaps:	0

US-09-873-224A-147 (1-345) x US-08-836-075A-50 (1-115)

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Qy         51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy        111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy        171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115
```

RESULT 2
US-08-635-886C-233
; Sequence 233, Application US/08635886C
; Patent No. 6555114
; GENERAL INFORMATION:
; APPLICANT: LEROUX-ROELS, Geert
; APPLICANT: DELEYS, Robert
; APPLICANT: MAERTENS, Geert
; TITLE OF INVENTION: IMMUNODOMINANT HUMAN T CELL EPITOPES OF HEPATITIS C
; TITLE OF INVENTION: VIRUS
; FILE REFERENCE: 2752-18
; CURRENT APPLICATION NUMBER: US/08/635,886C
; CURRENT FILING DATE: 1996-04-25
; PRIOR APPLICATION NUMBER: PCT/EP94/03555
; PRIOR FILING DATE: 1994-10-28
; PRIOR APPLICATION NUMBER: EP 93402718.6
; PRIOR FILING DATE: 1993-11-04
; NUMBER OF SEQ ID NOS: 286
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 233
; LENGTH: 100
; TYPE: PRT
; ORGANISM: hepatitis C virus
; FEATURE:
; NAME/KEY: MISC_FEATURE
; LOCATION: (17)..(17)
; OTHER INFORMATION: Xaa is any amino acid
US-08-635-886C-233

Alignment Scores:

Pred. No.:	4.51e-69	Length:	100
Score:	83.00	Matches:	83
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	72.17%	Indels:	0
DB:	4	Gaps:	0

US-09-873-224A-147 (1-345) x US-08-635-886C-233 (1-100)

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Db         18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy        111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy        171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCG 299
              |||||||||
Db         98 LeuSerPro 100
```

RESULT 3
US-08-974-690C-233
; Sequence 233, Application US/08974690C
; Patent No. 6613333
; GENERAL INFORMATION:
; APPLICANT: LEROUX-ROELS, Geert
; APPLICANT: DELEYS, Robert
; APPLICANT: MAERTENS, Geert
; TITLE OF INVENTION: IMMUNODOMINANT HUMAN T CELL EPITOPES OF HEPATITIS C
; TITLE OF INVENTION: VIRUS
; FILE REFERENCE: 2551-94
; CURRENT APPLICATION NUMBER: US/08/974,690C
; CURRENT FILING DATE: 1997-11-19
; PRIOR APPLICATION NUMBER: PCT/EP94/03555
; PRIOR FILING DATE: 1994-10-28
; PRIOR APPLICATION NUMBER: EP 93402718.6
; PRIOR FILING DATE: 1993-11-04
; NUMBER OF SEQ ID NOS: 286
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 233
; LENGTH: 100
; TYPE: PRT
; ORGANISM: hepatitis C virus
; FEATURE:
; NAME/KEY: MISC_FEATURE
; LOCATION: (17)..(17)
; OTHER INFORMATION: Xaa is any amino acid
US-08-974-690C-233

Alignment Scores:

Pred. No.:	4.51e-69	Length:	100
Score:	83.00	Matches:	83
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	72.17%	Indels:	0
DB:	4	Gaps:	0

US-09-873-224A-147 (1-345) x US-08-974-690C-233 (1-100)

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Qy         51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy        111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57
```

```
Qy        171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCG 299
              |||||||||
Db         98 LeuSerPro 100
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RESULT 4
US-08-244-116B-15
; Sequence 15, Application US/08244116B
; Patent No. 5763159
; GENERAL INFORMATION:
; APPLICANT: Simmonds, Peter
; APPLICANT: Chan, Shiu-Wan
; APPLICANT: Yap, Peng L.
; TITLE OF INVENTION: Hepatitis-C Virus Testing
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell, Seltzer, Park & Gibson, P.A.
; STREET: 1211 East Morehead Street
; CITY: Charlotte
; STATE: No. 5763159th Carolina
; COUNTRY: United States
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0. Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,116B
; FILING DATE: 15-JUL-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB92/02143
; FILING DATE: 20-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 1749-125
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 704-377-1561
; TELEFAX: 704-334-2014
; INFORMATION FOR SEQ ID NO: 15:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: yes
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: Hepatitis-C virus
US-08-244-116B-15

Alignment Scores:

Pred. No.:	7.6e-33	Length:	124
Score:	44.00	Matches:	44
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	38.26%	Indels:	0
DB:	1	Gaps:	0

US-09-873-224A-147 (1-345) x US-08-244-116B-15 (1-124)

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Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         68 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 87

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         88 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 107

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        108 ProArgArgArg 111
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RESULT 5
US-08-290-665A-187
; Sequence 187, Application US/08290665A
; Patent No. 5882852
; GENERAL INFORMATION:
; APPLICANT: BUKH, J., MILLER, R.H. AND
; APPLICANT: PURCELL, R.H.
; TITLE OF INVENTION: NUCLEOTIDE AND DEDUCED
; TITLE OF INVENTION: AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
; TITLE OF INVENTION: CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
; TITLE OF INVENTION: AND THE USE OF REAGENTS DERIVED FROM THESE
; TITLE OF INVENTION: SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
; NUMBER OF SEQUENCES: 263
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORGAN & FINNEGAN
; STREET: 345 PARK AVENUE
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: USA
; ZIP: 10154
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY DISK
; COMPUTER: IBM PC COMPATIBLE
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WORDPERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/290,665A
; FILING DATE: 15-AUG-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: RICHARD W. BORK
; REGISTRATION NUMBER: 36,459
; REFERENCE/DOCKET NUMBER: 2026-4116
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 758-4800
; TELEFAX: (212) 751-6849
; TELEX: 421792
; INFORMATION FOR SEQ ID NO: 187:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 191 amino acids
; TYPE: amino acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; ORIGINAL SOURCE:
; ORGANISM: homosapiens
; INDIVIDUAL ISOLATE: HK10
US-08-290-665A-187

Alignment Scores:

Pred. No.:	7.13e-33	Length:	191
Score:	44.00	Matches:	44
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	38.26%	Indels:	0
DB:	2	Gaps:	0

US-09-873-224A-147 (1-345) x US-08-290-665A-187 (1-191)

```
Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91
```

```
Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115
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RESULT 6
US-08-290-665A-188
; Sequence 188, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  188:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S52
US-08-290-665A-188

Alignment Scores:
Pred. No.:                7.13e-33        Length:          191
Score:                    44.00           Matches:         44
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              38.26%          Indels:          0
DB:                       2               Gaps:            0

US-09-873-224A-147 (1-345) x US-08-290-665A-188 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115
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```
RESULT 7
US-08-290-665A-189
; Sequence 189, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  189:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
US-08-290-665A-189

Alignment Scores:
Pred. No.:                7.13e-33        Length:          191
Score:                    44.00           Matches:         44
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              38.26%          Indels:          0
DB:                       2               Gaps:            0

US-09-873-224A-147 (1-345) x US-08-290-665A-189 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
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```
Db        112 ProArgArgArg 115

RESULT 8
US-08-290-665A-190
; Sequence 190, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  190:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  DK12
US-08-290-665A-190

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-190 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 9
US-08-290-665A-191
; Sequence 191, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  191:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z4
US-08-290-665A-191

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-191 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 10
US-08-290-665A-192
; Sequence 192, Application US/08290665A
; Patent No. 5882852
```

```
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  192:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z8
US-08-290-665A-192

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-192 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 11
US-08-290-665A-193
; Sequence 193, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  193:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z1
US-08-290-665A-193

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-193 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 12
US-08-290-665A-195
; Sequence 195, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
```

```
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  195:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z6
US-08-290-665A-195

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-195 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 13
US-08-290-665A-196
; Sequence 196, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  196:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z7
US-08-290-665A-196

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-196 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 14
US-08-290-665A-197
; Sequence 197, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
```

```
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/290,665A
;       FILING DATE:  15-AUG-1994
;       CLASSIFICATION:  435
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  197:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  191 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  DK13
US-08-290-665A-197

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-197 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
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Db        112 ProArgArgArg 115

RESULT 15
PCT-US95-10398-187
; Sequence 187, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  187:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  HK10
PCT-US95-10398-187

Alignment Scores:
Pred. No.:                7.13e-33        Length:         191
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-187 (1-191)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
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Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
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Db        112 ProArgArgArg 115


Search completed: February 25, 2004, 01:36:27
Job time : 18 secs
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GenCore version 5.1.6
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OM nucleic - protein search, using frame_plus_n2p model

Run on: February 25, 2004, 01:34:23 ; Search time 33.5 Seconds
(without alignments)
4349.127 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 115
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: OLIGO
Xgapop 60.0 , Xgapext 60.0
Ygapop 60.0 , Ygapext 60.0
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 809742 seqs, 211153259 residues

Word size: 1

Total number of hits satisfying chosen parameters: 1535912

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Command line parameters:
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-DB=Published_Applications_AA -QFMT=fastan -SUFFIX=rapb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=oligo
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=quality -THR_MIN=1
-ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US09873224_@CGN_1_1_53_@runat_24022004_132747_10665
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELOP=6 -DELEXT=7

Database : Published_Applications_AA:*
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
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4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
6: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep:*
7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
10: /cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	98	85.2	115	9	US-09-851-138-50	Sequence 50, Appl
2	98	85.2	115	10	US-09-899-046-148	Sequence 148, App
3	98	85.2	115	10	US-09-878-281-148	Sequence 148, App
4	44	38.3	124	14	US-10-396-964-15	Sequence 15, Appl
5	44	38.3	166	10	US-09-899-046-164	Sequence 164, App
6	44	38.3	166	10	US-09-878-281-164	Sequence 164, App
7	38	33.0	130	14	US-10-268-569-19	Sequence 19, Appl
8	38	33.0	161	14	US-10-230-381-5	Sequence 5, Appli
9	38	33.0	191	14	US-10-230-381-53	Sequence 53, Appl
10	38	33.0	191	14	US-10-230-381-54	Sequence 54, Appl
11	38	33.0	191	14	US-10-230-381-55	Sequence 55, Appl
12	38	33.0	193	14	US-10-230-381-50	Sequence 50, Appl
13	38	33.0	193	14	US-10-230-381-51	Sequence 51, Appl
14	38	33.0	193	14	US-10-230-381-52	Sequence 52, Appl
15	38	33.0	209	14	US-10-230-381-3	Sequence 3, Appli
16	38	33.0	209	14	US-10-230-381-7	Sequence 7, Appli
17	38	33.0	373	14	US-10-230-381-11	Sequence 11, Appl
18	38	33.0	373	14	US-10-230-381-13	Sequence 13, Appl
19	38	33.0	373	14	US-10-230-381-15	Sequence 15, Appl
20	36	31.3	166	10	US-09-899-046-194	Sequence 194, App
21	36	31.3	166	10	US-09-878-281-194	Sequence 194, App
22	34	29.6	113	9	US-09-921-397-78	Sequence 78, Appl
23	34	29.6	122	14	US-10-098-857B-1	Sequence 1, Appli
24	34	29.6	126	10	US-09-899-046-166	Sequence 166, App
25	34	29.6	126	10	US-09-878-281-166	Sequence 166, App
26	34	29.6	151	14	US-10-292-129-14	Sequence 14, Appl
27	34	29.6	182	9	US-09-929-955-2	Sequence 2, Appli
28	34	29.6	182	13	US-10-104-966-2	Sequence 2, Appli
29	34	29.6	190	14	US-10-268-562-1	Sequence 1, Appli
30	34	29.6	235	15	US-10-365-620-58	Sequence 58, Appl
31	34	29.6	249	15	US-10-365-620-54	Sequence 54, Appl
32	34	29.6	424	14	US-10-173-480-28	Sequence 28, Appl
33	34	29.6	459	15	US-10-365-620-60	Sequence 60, Appl
34	34	29.6	473	15	US-10-365-620-56	Sequence 56, Appl
35	34	29.6	2894	9	US-09-941-611-23	Sequence 23, Appl
36	34	29.6	2894	14	US-10-044-995-23	Sequence 23, Appl
37	34	29.6	3011	9	US-09-742-659-4	Sequence 4, Appli
38	34	29.6	3011	9	US-09-916-359-2	Sequence 2, Appli
39	34	29.6	3011	9	US-09-238-076-20	Sequence 20, Appl
40	34	29.6	3011	9	US-09-952-572-9	Sequence 9, Appli
41	34	29.6	3011	9	US-09-929-955-1	Sequence 1, Appli
42	34	29.6	3011	9	US-09-747-419-20	Sequence 20, Appl
43	34	29.6	3011	10	US-09-891-894-3	Sequence 3, Appli
44	34	29.6	3011	10	US-09-995-937-20	Sequence 20, Appl
45	34	29.6	3011	10	US-09-917-563-20	Sequence 20, Appl

ALIGNMENTS

RESULT 1
US-09-851-138-50
; Sequence 50, Application US/09851138
; Publication No. US20020183508A1
; GENERAL INFORMATION:
; APPLICANT: MAERTENS, GEERT
; STUYVER, LIEVEN
; TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
; AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
; AGENTS
; NUMBER OF SEQUENCES: 207
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ARNOLD, WHITE & DURKEE
; STREET: P.O. BOX 4433
; CITY: HOUSTON
; STATE: TEXAS
; COUNTRY: USA
; ZIP: 77210-4433
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Microsoft Word 6.0 / ASCII text output
; CURRENT APPLICATION DATA:

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;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;    INFORMATION FOR SEQ ID NO: 50:
;         SEQUENCE CHARACTERISTICS:
;             LENGTH: 115 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;         MOLECULE TYPE: peptide
;         SEQUENCE DESCRIPTION: SEQ ID NO: 50:
US-09-851-138-50

Alignment Scores:
Pred. No.:                5.71e-82        Length:          115
Score:                    98.00           Matches:         98
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              85.22%          Indels:          0
DB:                       9               Gaps:            0

US-09-873-224A-147 (1-345) x US-09-851-138-50 (1-115)

Qy          51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy         111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy         171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy         231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy         291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 2
US-09-899-046-148
; Sequence 148, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  148:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  115 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-899-046-148

Alignment Scores:
Pred. No.:                5.71e-82        Length:          115
Score:                    98.00           Matches:         98
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              85.22%          Indels:          0
DB:                       10              Gaps:            0

US-09-873-224A-147 (1-345) x US-09-899-046-148 (1-115)

Qy          51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
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Db          18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy         111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy         171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy         231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
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Db          78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy         291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 3
US-09-878-281-148
; Sequence 148, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  148:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  115 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-878-281-148

Alignment Scores:
Pred. No.:                5.71e-82        Length:          115
Score:                    98.00           Matches:         98
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              85.22%          Indels:          0
DB:                       10              Gaps:            0
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US-09-873-224A-147 (1-345) x US-09-878-281-148 (1-115)

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Qy          51 CGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTA 110
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          18 ArgProGlnAspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeu 37

Qy         111 CCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAA 170
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          38 ProArgArgGlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGln 57

Qy         171 CCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCT 230
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          58 ProArgSerArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAla 77

Qy         231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
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Db          78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy         291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
               ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115
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RESULT 4
US-10-396-964-15
; Sequence 15, Application US/10396964
; Publication No. US20030198946A1
; GENERAL INFORMATION:
; APPLICANT: Simmonds, Peter
; APPLICANT: Chan, Shiu-Wan
; APPLICANT: Yap, Peng L.
; TITLE OF INVENTION: Hepatitis-C Virus Testing
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell, Seltzer, Park & Gibson, P.A.
; STREET: 1211 East Morehead Street
; CITY: Charlotte
; STATE: No. US20030198946A1th Carolina
; COUNTRY: United States
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0. Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/396,964
; FILING DATE: 23-MARCH-2003
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,116B
; FILING DATE: 15-JUL-1994
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB92/02143
; FILING DATE: 20-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 1749-125
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 704-377-1561
; TELEFAX: 704-334-2014
; INFORMATION FOR SEQ ID NO: 15:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 124 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: yes
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: Hepatitis-C virus

US-10-396-964-15

Alignment Scores:

Pred. No.:	4.96e-32	Length:	124
Score:	44.00	Matches:	44
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	38.26%	Indels:	0
DB:	14	Gaps:	0

US-09-873-224A-147 (1-345) x US-10-396-964-15 (1-124)

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Qy         213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          68 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 87

Qy         273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          88 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 107

Qy         333 CCCCGGCGCAGG 344
               ||||||||||||
Db         108 ProArgArgArg 111
```

RESULT 5
US-09-899-046-164
; Sequence 164, Application US/09899046
; Publication No. US20030008274A1
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: New sequences of hepatitis C virus
; TITLE OF INVENTION: genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/899,046
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/362,455
; FILING DATE:
; INFORMATION FOR SEQ ID NO: 164:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 166 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-899-046-164

Alignment Scores:

Pred. No.:	4.76e-32	Length:	166
Score:	44.00	Matches:	44
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	38.26%	Indels:	0
DB:	10	Gaps:	0

US-09-873-224A-147 (1-345) x US-09-899-046-164 (1-166)

```
Qy         213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy         273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy         333 CCCCGGCGCAGG 344
               ||||||||||||
Db         112 ProArgArgArg 115
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```
RESULT 6
US-09-878-281-164
; Sequence 164, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/878,281
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;   INFORMATION FOR SEQ ID NO:  164:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  166 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-09-878-281-164

Alignment Scores:
Pred. No.:                4.76e-32        Length:         166
Score:                    44.00           Matches:        44
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              38.26%          Indels:         0
DB:                       10              Gaps:           0

US-09-873-224A-147 (1-345) x US-09-878-281-164 (1-166)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGAC 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyProAsnAsp 111

Qy        333 CCCCGGCGCAGG 344
              ||||||||||||
Db        112 ProArgArgArg 115

RESULT 7
US-10-268-569-19
; Sequence 19, Application US/10268569
; Publication No. US20030152965A1
; GENERAL INFORMATION:
;  APPLICANT: Ortho-Clinical Diagnostics, Inc.
;  TITLE OF INVENTION: HCV Core Protein Sequences
;  FILE REFERENCE: CDS-0288
;  CURRENT APPLICATION NUMBER: US/10/268,569
;  CURRENT FILING DATE:  2002-10-10
;  PRIOR APPLICATION NUMBER: 60/347,303
;  PRIOR FILING DATE: 2001-11-11
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 19
;   LENGTH: 130
;   TYPE: PRT
;   ORGANISM: Hepatitis C virus
US-10-268-569-19

Alignment Scores:
Pred. No.:                1.74e-26        Length:         130
Score:                    38.00           Matches:        38
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              33.04%          Indels:         0
DB:                       14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-268-569-19 (1-130)

Qy        213 GAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGC 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 GluGlyArgSerTrpAlaGlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCys 91

Qy        273 GGGTGGGCAGGGTGGCTCCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCA 326
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         92 GlyTrpAlaGlyTrpLeuLeuSerProArgGlySerArgProSerTrpGlyPro 109

RESULT 8
US-10-230-381-5
; Sequence 5, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as prophylactic
;  TITLE OF INVENTION:  therapeutic and diagnostic agents
;  FILE REFERENCE: INNX-124-EP
;  CURRENT APPLICATION NUMBER: US/10/230,381
;  CURRENT FILING DATE:  2002-08-29
;  NUMBER OF SEQ ID NOS: 63
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
;   LENGTH: 161
;   TYPE: PRT
;   ORGANISM: Hepatitis C virus
US-10-230-381-5

Alignment Scores:
Pred. No.:                1.69e-26        Length:         161
Score:                    38.00           Matches:        38
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              33.04%          Indels:         0
DB:                       14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-230-381-5 (1-161)

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 9
US-10-230-381-53
; Sequence 53, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as prophylactic
;  TITLE OF INVENTION:  therapeutic and diagnostic agents
;  FILE REFERENCE: INNX-124-EP
;  CURRENT APPLICATION NUMBER: US/10/230,381
;  CURRENT FILING DATE:  2002-08-29
;  NUMBER OF SEQ ID NOS: 63
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 53
;   LENGTH: 191
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
US-10-230-381-53

Alignment Scores:
```

```
Pred. No.:              1.65e-26        Length:         191
Score:                  38.00           Matches:        38
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            33.04%          Indels:         0
DB:                     14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-230-381-53 (1-191)

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 10
US-10-230-381-54
; Sequence 54, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as prophylactic,
;  TITLE OF INVENTION:  therapeutic and diagnostic agents
;  FILE REFERENCE: INNX-124-EP
;  CURRENT APPLICATION NUMBER: US/10/230,381
;  CURRENT FILING DATE:  2002-08-29
;  NUMBER OF SEQ ID NOS: 63
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 54
;   LENGTH: 191
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
US-10-230-381-54

Alignment Scores:
Pred. No.:              1.65e-26        Length:         191
Score:                  38.00           Matches:        38
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            33.04%          Indels:         0
DB:                     14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-230-381-54 (1-191)

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 11
US-10-230-381-55
; Sequence 55, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as prophylactic,
;  TITLE OF INVENTION:  therapeutic and diagnostic agents
;  FILE REFERENCE: INNX-124-EP
;  CURRENT APPLICATION NUMBER: US/10/230,381
;  CURRENT FILING DATE:  2002-08-29
;  NUMBER OF SEQ ID NOS: 63
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 55
;   LENGTH: 191
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
US-10-230-381-55

Alignment Scores:
Pred. No.:              1.65e-26        Length:         191
Score:                  38.00           Matches:        38
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            33.04%          Indels:         0
DB:                     14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-230-381-55 (1-191)

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 12
US-10-230-381-50
; Sequence 50, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as prophylactic,
;  TITLE OF INVENTION:  therapeutic and diagnostic agents
;  FILE REFERENCE: INNX-124-EP
;  CURRENT APPLICATION NUMBER: US/10/230,381
;  CURRENT FILING DATE:  2002-08-29
;  NUMBER OF SEQ ID NOS: 63
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 50
;   LENGTH: 193
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
US-10-230-381-50

Alignment Scores:
Pred. No.:              1.65e-26        Length:         193
Score:                  38.00           Matches:        38
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            33.04%          Indels:         0
DB:                     14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-230-381-50 (1-193)

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 81

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         82 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 99

RESULT 13
US-10-230-381-51
; Sequence 51, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as prophylactic,
;  TITLE OF INVENTION:  therapeutic and diagnostic agents
;  FILE REFERENCE: INNX-124-EP
;  CURRENT APPLICATION NUMBER: US/10/230,381
;  CURRENT FILING DATE:  2002-08-29
;  NUMBER OF SEQ ID NOS: 63
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 51
;   LENGTH: 193
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
US-10-230-381-51
```

```
Alignment Scores:
Pred. No.:                1.65e-26        Length:         193
Score:                    38.00           Matches:        38
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              33.04%          Indels:         0
DB:                       14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-230-381-51 (1-193)

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 81

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         82 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 99

RESULT 14
US-10-230-381-52
; Sequence 52, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as prophylactic,
;  TITLE OF INVENTION:  therapeutic and diagnostic agents
;  FILE REFERENCE: INNX-124-EP
;  CURRENT APPLICATION NUMBER: US/10/230,381
;  CURRENT FILING DATE:  2002-08-29
;  NUMBER OF SEQ ID NOS: 63
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 52
;   LENGTH: 193
;   TYPE: PRT
;   ORGANISM: hepatitis C virus
US-10-230-381-52

Alignment Scores:
Pred. No.:                1.65e-26        Length:         193
Score:                    38.00           Matches:        38
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              33.04%          Indels:         0
DB:                       14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-230-381-52 (1-193)

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 81

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         82 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 99

RESULT 15
US-10-230-381-3
; Sequence 3, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as prophylactic,
;  TITLE OF INVENTION:  therapeutic and diagnostic agents
;  FILE REFERENCE: INNX-124-EP
;  CURRENT APPLICATION NUMBER: US/10/230,381
;  CURRENT FILING DATE:  2002-08-29
;  NUMBER OF SEQ ID NOS: 63
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
;   LENGTH: 209
;   TYPE: PRT
;   ORGANISM: Hepatitis C virus
;   FEATURE:
;   NAME/KEY: MISC_FEATURE
;   LOCATION: (18)..(18)
;   OTHER INFORMATION: Xaa is any amino acid
US-10-230-381-3

Alignment Scores:
Pred. No.:                1.63e-26        Length:         209
Score:                    38.00           Matches:        38
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              33.04%          Indels:         0
DB:                       14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-230-381-3 (1-209)

Qy        231 CAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTC 290
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 GlnProGlyTyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeu 97

Qy        291 CTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 LeuSerProArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115


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Job time : 35.5 secs
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GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 27, 2004, 11:12:46 ; Search time 80 Seconds
(without alignments)
2393.226 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 345
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 682709 seqs, 277475446 residues

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Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0
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Post-processing: Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	309	89.6	309	3	US-08-836-075A-49	Sequence 49, Appl
2	43	12.5	549	3	US-08-441-971-60	Sequence 60, Appl
3	43	12.5	549	3	US-08-221-653-60	Sequence 60, Appl
4	43	12.5	549	3	US-08-442-144A-60	Sequence 60, Appl
5	43	12.5	549	3	US-08-441-970-60	Sequence 60, Appl
6	43	12.5	573	2	US-08-290-665A-141	Sequence 141, App
7	43	12.5	573	4	US-09-194-949A-5	Sequence 5, Appli
8	43	12.5	573	5	PCT-US95-10398-141	Sequence 141, App
9	43	12.5	831	3	US-08-836-075A-65	Sequence 65, Appl
10	40	11.6	573	2	US-08-290-665A-142	Sequence 142, App
11	40	11.6	573	5	PCT-US95-10398-142	Sequence 142, App
12	38	11.0	573	2	US-08-290-665A-136	Sequence 136, App
13	38	11.0	573	5	PCT-US95-10398-136	Sequence 136, App
14	35	10.1	573	2	US-08-290-665A-137	Sequence 137, App
15	35	10.1	573	2	US-08-290-665A-138	Sequence 138, App
16	35	10.1	573	2	US-08-290-665A-139	Sequence 139, App
17	35	10.1	573	5	PCT-US95-10398-137	Sequence 137, App
18	35	10.1	573	5	PCT-US95-10398-138	Sequence 138, App
19	35	10.1	573	5	PCT-US95-10398-139	Sequence 139, App
20	35	10.1	803	1	US-08-157-235-1	Sequence 1, Appli
21	35	10.1	803	1	US-08-157-235-2	Sequence 2, Appli
22	35	10.1	803	1	US-08-157-235-3	Sequence 3, Appli
23	35	10.1	803	1	US-08-157-235-4	Sequence 4, Appli
24	34	9.9	573	2	US-08-290-665A-135	Sequence 135, App
25	34	9.9	573	5	PCT-US95-10398-135	Sequence 135, App
26	34	9.9	803	1	US-08-157-235-5	Sequence 5, Appli
27	31	9.0	183	1	US-07-681-703B-21	Sequence 21, Appl
28	31	9.0	183	2	US-08-407-410B-21	Sequence 21, Appl
29	31	9.0	183	2	US-08-485-500-21	Sequence 21, Appl
30	31	9.0	183	5	PCT-US91-02370-21	Sequence 21, Appl
31	31	9.0	270	1	US-07-681-703B-23	Sequence 23, Appl
32	31	9.0	270	2	US-08-407-410B-23	Sequence 23, Appl
33	31	9.0	270	2	US-08-485-500-23	Sequence 23, Appl
34	31	9.0	270	5	PCT-US91-02370-23	Sequence 23, Appl
35	31	9.0	273	1	US-07-681-703B-19	Sequence 19, Appl
36	31	9.0	273	2	US-08-407-410B-19	Sequence 19, Appl
37	31	9.0	273	2	US-08-485-500-19	Sequence 19, Appl
38	31	9.0	273	5	PCT-US91-02370-19	Sequence 19, Appl
39	31	9.0	306	2	US-08-537-811-35	Sequence 35, Appl
40	31	9.0	327	3	US-08-836-075A-1	Sequence 1, Appli
41	31	9.0	355	3	US-08-444-818-104	Sequence 104, App
42	31	9.0	355	3	US-08-444-818-106	Sequence 106, App
43	31	9.0	360	1	US-07-681-703B-17	Sequence 17, Appl
44	31	9.0	360	2	US-08-407-410B-17	Sequence 17, Appl
45	31	9.0	360	2	US-08-485-500-17	Sequence 17, Appl

ALIGNMENTS

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RESULT 1
US-08-836-075A-49
; Sequence 49, Application US/08836075A
; Patent No. 6180768
;  GENERAL INFORMATION:
;    APPLICANT:  MAERTENS, GEERT
;    APPLICANT:  STUYVER, LIEVEN
;    TITLE OF INVENTION:  NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;    TITLE OF INVENTION:  AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;    TITLE OF INVENTION:  AGENTS
;    NUMBER OF SEQUENCES:  207
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ARNOLD, WHITE & DURKEE
;      STREET:  P.O. BOX 4433
;      CITY:  HOUSTON
;      STATE:  TEXAS
;      COUNTRY:  USA
;      ZIP:  77210-4433
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  Microsoft Word 6.0 / ASCII text output
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/836,075A
;      FILING DATE:  21 Apr 1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/EP95/04155
;      FILING DATE:  23 Oct 1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 94870166.9
;      FILING DATE:  21 Oct 1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 95870076.7
;      FILING DATE:  28 Jun 1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  KAMMERER, PATRICIA A.
;      REGISTRATION NUMBER:  29,775
;      REFERENCE/DOCKET NUMBER:  INNS:004
;  INFORMATION FOR SEQ ID NO:  49:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  309 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-836-075A-49
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  Query Match             89.6%;  Score 309;  DB 3;  Length 309;
  Best Local Similarity   100.0%;  Pred. No. 9.2e-147;
  Matches  309;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300

Qy        301 GCGGCTCTC 309
              |||||||||
Db        301 GCGGCTCTC 309


RESULT 2
US-08-441-971-60
; Sequence 60, Application US/08441971
; Patent No. 6071693
;  GENERAL INFORMATION:
;    APPLICANT:  Tai-An Cha
;    TITLE OF INVENTION:  HCV GENOMIC SEQUENCES FOR
;    TITLE OF INVENTION:  DIAGNOSTICS AND THERAPEUTICS
;    NUMBER OF SEQUENCES:  147
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Wolf, Greenfield & Sacks, P.C.
;      STREET:  600 Atlantic Avenue
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  USA
;      ZIP:  02210
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 5.25 inch
;      COMPUTER:  IBM compatible
;      OPERATING SYSTEM:  MS-DOS Version 3.3
;      SOFTWARE:  WordPerfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/441,971
;      FILING DATE:  16-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/221,653
;      FILING DATE:
;      APPLICATION NUMBER:  US/07/881,528
;      FILING DATE:
;      APPLICATION NUMBER:  07/697,326
;      FILING DATE:  8 May 1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Janiuk, Anthony J.
;      REGISTRATION NUMBER:  29,809
;      REFERENCE/DOCKET NUMBER:  C0772/7000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 720-3500
;      TELEFAX:  (617) 720-2441
;      TELEX:  EZEKIEL
;  INFORMATION FOR SEQ ID NO:  60:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  549 nucleotides
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  nac5
US-08-441-971-60

  Query Match             12.5%;  Score 43;  DB 3;  Length 549;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 3
US-08-221-653-60
; Sequence 60, Application US/08221653
; Patent No. 6190864
;  GENERAL INFORMATION:
;    APPLICANT:  Tai-An Cha
;    TITLE OF INVENTION:  HCV GENOMIC SEQUENCES FOR
;    TITLE OF INVENTION:  DIAGNOSTICS AND THERAPEUTICS
;    NUMBER OF SEQUENCES:  147
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Wolf, Greenfield & Sacks, P.C.
;      STREET:  600 Atlantic Avenue
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  USA
;      ZIP:  02210
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 5.25 inch
;      COMPUTER:  IBM compatible
;      OPERATING SYSTEM:  MS-DOS Version 3.3
;      SOFTWARE:  WordPerfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/221,653
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/07/881,528
;      FILING DATE:
;      APPLICATION NUMBER:  07/697,326
;      FILING DATE:  8 May 1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Janiuk, Anthony J.
;      REGISTRATION NUMBER:  29,809
;      REFERENCE/DOCKET NUMBER:  C0772/7000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 720-3500
;      TELEFAX:  (617) 720-2441
;      TELEX:  EZEKIEL
;  INFORMATION FOR SEQ ID NO:  60:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  549 nucleotides
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  nac5
US-08-221-653-60

  Query Match             12.5%;  Score 43;  DB 3;  Length 549;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254
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RESULT 4
US-08-442-144A-60
; Sequence 60, Application US/08442144A
; Patent No. 6214583
;  GENERAL INFORMATION:
;    APPLICANT:  Tai-An Cha
;    APPLICANT:  Eileen Beall
;    APPLICANT:  Bruce Irvine
;    APPLICANT:  Janice Kolberg
;    APPLICANT:  Michael S. Urdea
;    TITLE OF INVENTION:  HCV GENOMIC SEQUENCES FOR
;    TITLE OF INVENTION:  DIAGNOSTICS AND THERAPEUTICS
;    NUMBER OF SEQUENCES:  148
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Chiron Corporation
;      STREET:  4560 Horton Street
;      CITY:  Emeryville
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  94608-2916
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 Inch
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Windows NT
;      SOFTWARE:  Microsoft Word 97
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/442,144A
;      FILING DATE:  MAY 16, 1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/221,653
;      FILING DATE:  APRIL 1, 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Doreen Yatko Trujillo
;      REGISTRATION NUMBER:  35,719
;      REFERENCE/DOCKET NUMBER:  CHIR-0121
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  215-568-3100
;      TELEFAX:  215-568-3439
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  60:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  549 Nucleotides
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    MOLECULE TYPE:  DNA
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  nac5
US-08-442-144A-60

  Query Match             12.5%;  Score 43;  DB 3;  Length 549;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 5
US-08-441-970-60
; Sequence 60, Application US/08441970
; Patent No. 6297370
;  GENERAL INFORMATION:
;    APPLICANT:  Tai-An Cha
;    TITLE OF INVENTION:  HCV GENOMIC SEQUENCES FOR
;    TITLE OF INVENTION:  DIAGNOSTICS AND THERAPEUTICS
;    NUMBER OF SEQUENCES:  147
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Wolf, Greenfield & Sacks, P.C.
;      STREET:  600 Atlantic Avenue
;      CITY:  Boston
;      STATE:  Massachusetts
;      COUNTRY:  USA
;      ZIP:  02210
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 5.25 inch
;      COMPUTER:  IBM compatible
;      OPERATING SYSTEM:  MS-DOS Version 3.3
;      SOFTWARE:  WordPerfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/441,970
;      FILING DATE:  16-MAY-1995
;      CLASSIFICATION:  536
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/881,528
;      FILING DATE:  08-MAY-1992
;      APPLICATION NUMBER:  07/697,326
;      FILING DATE:  8 May 1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Janiuk, Anthony J.
;      REGISTRATION NUMBER:  29,809
;      REFERENCE/DOCKET NUMBER:  C0772/7000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 720-3500
;      TELEFAX:  (617) 720-2441
;      TELEX:  EZEKIEL
;  INFORMATION FOR SEQ ID NO:  60:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  549 nucleotides
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  nac5
US-08-441-970-60

  Query Match             12.5%;  Score 43;  DB 3;  Length 549;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 6
US-08-290-665A-141
; Sequence 141, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
```

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;       FILING DATE:  15-AUG-1994
;       CLASSIFICATION:  435
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  141:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  573 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  Z1
US-08-290-665A-141

  Query Match             12.5%;  Score 43;  DB 2;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 7
US-09-194-949A-5
; Sequence 5, Application US/09194949A
; Patent No. 6653125
; GENERAL INFORMATION:
;  APPLICANT: Merck & Co., Inc.
;  APPLICANT:  Donnelly, John J.
;  APPLICANT:  Fu, Tong-Ming
;  APPLICANT:  Liu, Margaret A.
;  APPLICANT:  Shiver, John W.
;  TITLE OF INVENTION: SYNTHETIC HEPATITIS C GENES
;  FILE REFERENCE: 19732YP
;  CURRENT APPLICATION NUMBER: US/09/194,949A
;  CURRENT FILING DATE:  2000-02-17
;  PRIOR APPLICATION NUMBER: PCT/US97/09884
;  PRIOR FILING DATE: 1997-06-06
;  PRIOR APPLICATION NUMBER: 60/020,494
;  PRIOR FILING DATE: 1996-06-11
;  PRIOR APPLICATION NUMBER: 60/033,534
;  PRIOR FILING DATE: 1996-12-20
;  PRIOR APPLICATION NUMBER: 08/865,823
;  PRIOR FILING DATE: 1997-05-30
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 573
;   TYPE: DNA
;   ORGANISM: Hepatitis C Virus
US-09-194-949A-5

  Query Match             12.5%;  Score 43;  DB 4;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 8
PCT-US95-10398-141
; Sequence 141, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J.; MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  141:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z1
PCT-US95-10398-141

  Query Match             12.5%;  Score 43;  DB 5;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 9
US-08-836-075A-65
; Sequence 65, Application US/08836075A
; Patent No. 6180768
;  GENERAL INFORMATION:
;    APPLICANT:  MAERTENS, GEERT
;    APPLICANT:  STUYVER, LIEVEN
;    TITLE OF INVENTION:  NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;    TITLE OF INVENTION:  AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;    TITLE OF INVENTION:  AGENTS
;    NUMBER OF SEQUENCES:  207
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ARNOLD, WHITE & DURKEE
;      STREET:  P.O. BOX 4433
;      CITY:  HOUSTON
```

```
;       STATE:  TEXAS
;       COUNTRY:  USA
;       ZIP:  77210-4433
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  Microsoft Word 6.0 / ASCII text output
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/836,075A
;       FILING DATE:  21 Apr 1997
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/EP95/04155
;       FILING DATE:  23 Oct 1995
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  EP 94870166.9
;       FILING DATE:  21 Oct 1994
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  EP 95870076.7
;       FILING DATE:  28 Jun 1995
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  KAMMERER, PATRICIA A.
;       REGISTRATION NUMBER:  29,775
;       REFERENCE/DOCKET NUMBER:  INNS:004
;   INFORMATION FOR SEQ ID NO:  65:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  831 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
US-08-836-075A-65

  Query Match             12.5%;  Score 43;  DB 3;  Length 831;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        227 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 269


RESULT 10
US-08-290-665A-142
; Sequence 142, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES.
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  142:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z5
US-08-290-665A-142

  Query Match             11.6%;  Score 40;  DB 2;  Length 573;
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  Matches   40;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCC 250
              ||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCC 251


RESULT 11
PCT-US95-10398-142
; Sequence 142, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  142:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
```

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;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  Z5
PCT-US95-10398-142

  Query Match             11.6%;  Score 40;  DB 5;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 7e-11;
  Matches   40;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCC 250
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Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCC 251


RESULT 12
US-08-290-665A-136
; Sequence 136, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  136:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S52
US-08-290-665A-136

  Query Match             11.0%;  Score 38;  DB 2;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 7.2e-10;
  Matches   38;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        261 AATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 298
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Db        262 AATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 299


RESULT 13
PCT-US95-10398-136
; Sequence 136, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
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;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  136:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S52
PCT-US95-10398-136

  Query Match             11.0%;  Score 38;  DB 5;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 7.2e-10;
  Matches   38;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        261 AATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 298
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Db        262 AATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 299


RESULT 14
US-08-290-665A-137
; Sequence 137, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
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;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
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;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  137:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
US-08-290-665A-137

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  Best Local Similarity   100.0%;  Pred. No. 2.4e-08;
  Matches   35;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db        265 GAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 299


RESULT 15
US-08-290-665A-138
; Sequence 138, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
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;      COMPUTER:  IBM PC COMPATIBLE
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;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  138:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  DK12
US-08-290-665A-138

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  Best Local Similarity   100.0%;  Pred. No. 2.4e-08;
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Db        265 GAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCC 299


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GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

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(without alignments)
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Title: US-09-873-224A-147
Perfect score: 345
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Gapop 60.0 , Gapext 60.0

Searched: 2353733 seqs, 1803733377 residues

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Post-processing: Listing first 45 summaries

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18: /cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	309	89.6	309	9	US-09-851-138-49	Sequence 49, Appl
2	296	85.8	346	10	US-09-899-046-147	Sequence 147, App
3	296	85.8	346	10	US-09-878-281-147	Sequence 147, App
4	43	12.5	573	10	US-09-194-949-5	Sequence 5, Appli
5	43	12.5	831	9	US-09-851-138-65	Sequence 65, Appl
6	31	9.0	152	9	US-09-921-397-39	Sequence 39, Appl
7	31	9.0	234	9	US-09-921-397-41	Sequence 41, Appl
8	31	9.0	300	14	US-10-071-867-16	Sequence 16, Appl
9	31	9.0	310	9	US-09-921-397-114	Sequence 114, App
10	31	9.0	327	9	US-09-851-138-1	Sequence 1, Appli
11	31	9.0	339	9	US-09-921-397-115	Sequence 115, App
12	31	9.0	480	14	US-10-071-867-15	Sequence 15, Appl
13	31	9.0	540	15	US-10-150-283-2	Sequence 2, Appli
14	31	9.0	708	15	US-10-365-620-57	Sequence 57, Appl
15	31	9.0	750	15	US-10-365-620-53	Sequence 53, Appl
16	31	9.0	1380	15	US-10-365-620-59	Sequence 59, Appl
17	31	9.0	1422	15	US-10-365-620-55	Sequence 55, Appl
18	31	9.0	2433	9	US-09-973-025-49	Sequence 49, Appl
19	31	9.0	2433	10	US-09-899-303-49	Sequence 49, Appl
20	31	9.0	2433	10	US-09-995-808-49	Sequence 49, Appl
21	31	9.0	2433	10	US-09-995-860-49	Sequence 49, Appl
22	31	9.0	2433	10	US-09-995-791-49	Sequence 49, Appl
23	31	9.0	9365	10	US-09-827-688-7	Sequence 7, Appli
24	31	9.0	9379	9	US-09-916-359-1	Sequence 1, Appli
25	31	9.0	9413	10	US-09-827-688-6	Sequence 6, Appli
26	31	9.0	9416	9	US-09-238-076-19	Sequence 19, Appl
27	31	9.0	9416	9	US-09-929-955-13	Sequence 13, Appl
28	31	9.0	9416	10	US-09-995-937-19	Sequence 19, Appl
29	31	9.0	9416	10	US-09-917-563-19	Sequence 19, Appl
30	31	9.0	9416	13	US-10-104-966-13	Sequence 13, Appl
31	31	9.0	9646	9	US-09-742-659-3	Sequence 3, Appli
32	31	9.0	9646	9	US-09-238-076-1	Sequence 1, Appli
33	31	9.0	9646	10	US-09-995-937-1	Sequence 1, Appli
34	31	9.0	9646	10	US-09-917-563-1	Sequence 1, Appli
35	31	9.0	10803	9	US-09-747-419-17	Sequence 17, Appl
36	31	9.0	10803	14	US-10-259-275-17	Sequence 17, Appl
37	31	9.0	12980	9	US-09-238-076-5	Sequence 5, Appli
38	31	9.0	12980	10	US-09-995-937-5	Sequence 5, Appli
39	31	9.0	12980	10	US-09-917-563-5	Sequence 5, Appli
40	29	8.4	240	14	US-10-396-964-19	Sequence 19, Appl
41	28	8.1	223	9	US-09-851-138-9	Sequence 9, Appli
42	28	8.1	499	10	US-09-899-046-151	Sequence 151, App
43	28	8.1	499	10	US-09-878-281-151	Sequence 151, App
44	28	8.1	509	10	US-09-899-046-41	Sequence 41, Appl
45	28	8.1	509	10	US-09-899-046-43	Sequence 43, Appl

ALIGNMENTS

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RESULT 1
US-09-851-138-49
; Sequence 49, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 49:
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;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 309 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: cDNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       SEQUENCE DESCRIPTION: SEQ ID NO: 49:
US-09-851-138-49

  Query Match             89.6%;  Score 309;  DB 9;  Length 309;
  Best Local Similarity   100.0%;  Pred. No. 3e-152;
  Matches  309;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
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Db        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300

Qy        301 GCGGCTCTC 309
              |||||||||
Db        301 GCGGCTCTC 309


RESULT 2
US-09-899-046-147
; Sequence 147, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  147:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  346 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..346
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..342
US-09-899-046-147

  Query Match             85.8%;  Score 296;  DB 10;  Length 346;
  Best Local Similarity   100.0%;  Pred. No. 2e-145;
  Matches  296;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         50 CCGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCT 109
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         51 CCGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCT 110

Qy        110 ACCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCA 169
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        111 ACCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCA 170

Qy        170 ACCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGC 229
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        171 ACCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGC 230

Qy        230 TCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCT 289
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        231 TCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCT 290

Qy        290 CCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 CCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 346


RESULT 3
US-09-878-281-147
; Sequence 147, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  147:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  346 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..346
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..342
US-09-878-281-147

  Query Match             85.8%;  Score 296;  DB 10;  Length 346;
  Best Local Similarity   100.0%;  Pred. No. 2e-145;
  Matches  296;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         50 CCGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCT 109
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         51 CCGGCCACAGGACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCT 110
```

```
Qy        110 ACCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCA 169
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        111 ACCACGCAGGGGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCA 170

Qy        170 ACCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGC 229
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        171 ACCTCGCAGTAGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGC 230

Qy        230 TCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCT 289
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        231 TCAGCCCGGGTACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCT 290

Qy        290 CCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
              |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 CCTGTCCCCGCGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 346


RESULT 4
US-09-194-949-5
; Sequence 5, Application US/09194949
; Publication No. US20030053987A1
; GENERAL INFORMATION:
;  APPLICANT:  Merck & Co., Inc.
;  APPLICANT:  Donnelly, John J.
;  APPLICANT:  Fu, Tong-Ming
;  APPLICANT:  Liu, Margaret A.
;  APPLICANT:  Shiver, John W.
;  TITLE OF INVENTION:  SYNTHETIC HEPATITIS C GENES
;  FILE REFERENCE:  19732YP
;  CURRENT APPLICATION NUMBER: US/09/194,949
;  CURRENT FILING DATE:  2000-02-17
;  PRIOR APPLICATION NUMBER:  PCT/US97/09884
;  PRIOR FILING DATE:  1997-06-06
;  PRIOR APPLICATION NUMBER:  60/020,494
;  PRIOR FILING DATE:  1996-06-11
;  PRIOR APPLICATION NUMBER:  60/033,534
;  PRIOR FILING DATE:  1996-12-20
;  NUMBER OF SEQ ID NOS:  25
;  SOFTWARE:  FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 573
;   TYPE: DNA
;   ORGANISM: Hepatitis C Virus
US-09-194-949-5

  Query Match             12.5%;  Score 43;  DB 10;  Length 573;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 5
US-09-851-138-65
; Sequence 65, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 65:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 831 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: cDNA
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        SEQUENCE DESCRIPTION: SEQ ID NO: 65:
US-09-851-138-65

  Query Match             12.5%;  Score 43;  DB 9;  Length 831;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-12;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||||||||||||||
Db        227 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 269


RESULT 6
US-09-921-397-39
; Sequence 39, Application US/09921397
; Patent No. US20020151484A1
; GENERAL INFORMATION:
;  APPLICANT: HYBRIGENICS
;  TITLE OF INVENTION: SID nucleic acids and polypeptides selected from a
;  TITLE OF INVENTION:  pathogenic strain of the hepatitis C virus and
;  TITLE OF INVENTION:  applications thereof
;  FILE REFERENCE: B4809A - JAZ
;  CURRENT APPLICATION NUMBER: US/09/921,397
;  CURRENT FILING DATE:  2001-08-02
;  PRIOR APPLICATION NUMBER: EP 00402225.7
;  PRIOR FILING DATE: 2000-08-03
;  NUMBER OF SEQ ID NOS: 156
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 39
;   LENGTH: 152
;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
US-09-921-397-39

  Query Match              9.0%;  Score 31;  DB 9;  Length 152;
  Best Local Similarity   100.0%;  Pred. No. 4.2e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||
Db        120 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 150


RESULT 7
US-09-921-397-41
```

```
; Sequence 41, Application US/09921397
; Patent No. US20020151484A1
; GENERAL INFORMATION:
;  APPLICANT: HYBRIGENICS
;  TITLE OF INVENTION: SID nucleic acids and polypeptides selected from a
;  TITLE OF INVENTION:  pathogenic strain of the hepatitis C virus and
;  TITLE OF INVENTION:  applications thereof
;  FILE REFERENCE: B4809A - JAZ
;  CURRENT APPLICATION NUMBER: US/09/921,397
;  CURRENT FILING DATE:  2001-08-02
;  PRIOR APPLICATION NUMBER: EP 00402225.7
;  PRIOR FILING DATE: 2000-08-03
;  NUMBER OF SEQ ID NOS: 156
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 41
;   LENGTH: 234
;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
US-09-921-397-41

  Query Match             9.0%;  Score 31;  DB 9;  Length 234;
  Best Local Similarity   100.0%;  Pred. No. 4.1e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||
Db        186 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 216


RESULT 8
US-10-071-867-16
; Sequence 16, Application US/10071867
; Publication No. US20030166267A1
; GENERAL INFORMATION:
;  APPLICANT: CreaGene Inc.
;  TITLE OF INVENTION: METHOD FOR IMPROVING GENETIC STABILITY OF FOREIGN INSERT
;  TITLE OF INVENTION:  NUCLEOTIDE SEQUENCE IN RECOMBINANT SINGLE-STRANDED RNA VIRUS
;  FILE REFERENCE: CreaGene-USA-1
;  CURRENT APPLICATION NUMBER: US/10/071,867
;  CURRENT FILING DATE:  2002-02-08
;  PRIOR APPLICATION NUMBER: KR 2001-6229
;  PRIOR FILING DATE: 2001-02-08
;  NUMBER OF SEQ ID NOS: 95
;  SOFTWARE: KopatentIn 1.71
; SEQ ID NO 16
;   LENGTH: 300
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: HCV core-100
US-10-071-867-16

  Query Match             9.0%;  Score 31;  DB 14;  Length 300;
  Best Local Similarity   100.0%;  Pred. No. 4e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||
Db        224 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 9
US-09-921-397-114
; Sequence 114, Application US/09921397
; Patent No. US20020151484A1
; GENERAL INFORMATION:
;  APPLICANT: HYBRIGENICS
;  TITLE OF INVENTION: SID nucleic acids and polypeptides selected from a
;  TITLE OF INVENTION:  pathogenic strain of the hepatitis C virus and
;  TITLE OF INVENTION:  applications thereof
;  FILE REFERENCE: B4809A - JAZ
;  CURRENT APPLICATION NUMBER: US/09/921,397
;  CURRENT FILING DATE:  2001-08-02
;  PRIOR APPLICATION NUMBER: EP 00402225.7
;  PRIOR FILING DATE: 2000-08-03
;  NUMBER OF SEQ ID NOS: 156
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 114
;   LENGTH: 310
;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
US-09-921-397-114

  Query Match             9.0%;  Score 31;  DB 9;  Length 310;
  Best Local Similarity   100.0%;  Pred. No. 3.9e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||
Db        264 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 294


RESULT 10
US-09-851-138-1
; Sequence 1, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTI(
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 1:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 327 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: cDNA
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-851-138-1

  Query Match             9.0%;  Score 31;  DB 9;  Length 327;
  Best Local Similarity   100.0%;  Pred. No. 3.9e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        211 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTA 241
```

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                    ||||||||||||||||||||||||||||||||
Db        212 CCGAGGGCAGGTCCTGGGCTCAGCCCGGGTA 242


RESULT 11
US-09-921-397-115
; Sequence 115, Application US/09921397
; Patent No. US20020151484A1
; GENERAL INFORMATION:
;  APPLICANT: HYBRIGENICS
;  TITLE OF INVENTION: SID nucleic acids and polypeptides selected from a
;  TITLE OF INVENTION:  pathogenic strain of the hepatitis C virus and
;  TITLE OF INVENTION:  applications thereof
;  FILE REFERENCE: B4809A - JAZ
;  CURRENT APPLICATION NUMBER: US/09/921,397
;  CURRENT FILING DATE:  2001-08-02
;  PRIOR APPLICATION NUMBER: EP 00402225.7
;  PRIOR FILING DATE: 2000-08-03
;  NUMBER OF SEQ ID NOS: 156
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 115
;   LENGTH: 339
;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
US-09-921-397-115

  Query Match             9.0%;  Score 31;  DB 9;  Length 339;
  Best Local Similarity   100.0%;  Pred. No. 3.9e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
                ||||||||||||||||||||||||||||||
Db        224 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 12
US-10-071-867-15
; Sequence 15, Application US/10071867
; Publication No. US20030166267A1
; GENERAL INFORMATION:
;  APPLICANT: CreaGene Inc.
;  TITLE OF INVENTION: METHOD FOR IMPROVING GENETIC STABILITY OF FOREIGN INSERT
;  TITLE OF INVENTION:  NUCLEOTIDE SEQUENCE IN RECOMBINANT SINGLE-STRANDED RNA VIRUS
;  FILE REFERENCE: CreaGene-USA-1
;  CURRENT APPLICATION NUMBER: US/10/071,867
;  CURRENT FILING DATE:  2002-02-08
;  PRIOR APPLICATION NUMBER: KR 2001-6229
;  PRIOR FILING DATE: 2001-02-08
;  NUMBER OF SEQ ID NOS: 95
;  SOFTWARE: KopatentIn 1.71
; SEQ ID NO 15
;   LENGTH: 480
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: HCV core-160
US-10-071-867-15

  Query Match             9.0%;  Score 31;  DB 14;  Length 480;
  Best Local Similarity   100.0%;  Pred. No. 3.8e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
                ||||||||||||||||||||||||||||||
Db        224 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 254


RESULT 13
US-10-150-283-2
; Sequence 2, Application US/10150283
; Publication No. US20030219407A1
; GENERAL INFORMATION:
;  APPLICANT: Ding, Shou-wei
;  APPLICANT:  Li, Hong-wei
;  APPLICANT:  Li, Wan-xiang
;  APPLICANT:  The Regents of the University of California
;  TITLE OF INVENTION: RNA Silencing in Animals as an Antiviral Defense
;  FILE REFERENCE: 02307O-124100US
;  CURRENT APPLICATION NUMBER: US/10/150,283
;  CURRENT FILING DATE:  2002-05-15
;  NUMBER OF SEQ ID NOS: 2
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
;   LENGTH: 540
;   TYPE: RNA
;   ORGANISM: Hepatitis C virus
;   FEATURE:
;   OTHER INFORMATION: F protein
US-10-150-283-2

  Query Match             9.0%;  Score 31;  DB 15;  Length 540;
  Best Local Similarity   80.6%;  Pred. No. 3.8e-06;
  Matches   25;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
                ||:||||:||||||||:||||::||||||:
Db        224 CCUGGGCUCAGCCCGGGUACCCUUGGCCCCU 254


RESULT 14
US-10-365-620-57
; Sequence 57, Application US/10365620
; Publication No. US20040001853A1
; GENERAL INFORMATION:
;  APPLICANT: George, Rajan
;  APPLICANT:  Tyrrell, Lorne
;  APPLICANT:  No. US20040001853A1jaim, Antoine
;  TITLE OF INVENTION: Chimeric Antigens for Eliciting An Immune Response
;  FILE REFERENCE: 656.0016
;  CURRENT APPLICATION NUMBER: US/10/365,620
;  CURRENT FILING DATE:  2003-02-13
;  PRIOR APPLICATION NUMBER: US60/423,578
;  PRIOR FILING DATE: 2003-11-05
;  PRIOR APPLICATION NUMBER: 60/390,564
;  PRIOR FILING DATE: 2002-06-20
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 57
;   LENGTH: 708
;   TYPE: DNA
;   ORGANISM: HCV Core
US-10-365-620-57

  Query Match             9.0%;  Score 31;  DB 15;  Length 708;
  Best Local Similarity   100.0%;  Pred. No. 3.7e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
                ||||||||||||||||||||||||||||||
Db        314 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 344


RESULT 15
US-10-365-620-53
; Sequence 53, Application US/10365620
; Publication No. US20040001853A1
; GENERAL INFORMATION:
;  APPLICANT: George, Rajan
;  APPLICANT:  Tyrrell, Lorne
;  APPLICANT:  No. US20040001853A1jaim, Antoine
;  TITLE OF INVENTION: Chimeric Antigens for Eliciting An Immune Response
;  FILE REFERENCE: 656.0016
;  CURRENT APPLICATION NUMBER: US/10/365,620
;  CURRENT FILING DATE:  2003-02-13
;  PRIOR APPLICATION NUMBER: US60/423,578
;  PRIOR FILING DATE: 2003-11-05
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;  PRIOR APPLICATION NUMBER: 60/390,564
;  PRIOR FILING DATE: 2002-06-20
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 53
;   LENGTH: 750
;   TYPE: DNA
;   ORGANISM: ORF of HCV Core Protein
US-10-365-620-53

  Query Match             9.0%;  Score 31;  DB 15;  Length 750;
  Best Local Similarity   100.0%;  Pred. No. 3.6e-06;
  Matches   31;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        223 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 253
              |||||||||||||||||||||||||||||||
Db        314 CCTGGGCTCAGCCCGGGTACCCTTGGCCCCT 344


Search completed: February 27, 2004, 13:17:55
Job time : 270 secs
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GenCore version 5.1.6

OM nucleic - protein search, using frame_plus_n2p model

Run on: February 25, 2004, 01:11:16 ; Search time 17.5 Seconds
(without alignments)
2035.538 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 639
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 778828

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_n2p.model -DEV=xlp
-Q=/cgn2_1/USPTO_spool_p/US09873224/runat_24022004_132650_9785/app_query.fasta_1.519
-DB=Issued_Patents_AA -QFMT=fastan -SUFFIX=rai -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US09873224_@CGN_1_1_27_@runat_24022004_132650_9785 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	608	95.1	115	3	US-08-836-075A-50	Sequence 50, Appl
2	588	92.0	191	2	US-08-290-665A-187	Sequence 187, App
3	588	92.0	191	2	US-08-290-665A-188	Sequence 188, App
4	588	92.0	191	2	US-08-290-665A-190	Sequence 190, App
5	588	92.0	191	5	PCT-US95-10398-187	Sequence 187, App
6	588	92.0	191	5	PCT-US95-10398-188	Sequence 188, App
7	588	92.0	191	5	PCT-US95-10398-190	Sequence 190, App
8	587	91.9	191	2	US-08-290-665A-189	Sequence 189, App
9	587	91.9	191	5	PCT-US95-10398-189	Sequence 189, App
10	574	89.8	191	2	US-08-290-665A-192	Sequence 192, App
11	574	89.8	191	2	US-08-290-665A-193	Sequence 193, App
12	574	89.8	191	2	US-08-290-665A-195	Sequence 195, App
13	574	89.8	191	5	PCT-US95-10398-192	Sequence 192, App
14	574	89.8	191	5	PCT-US95-10398-193	Sequence 193, App
15	574	89.8	191	5	PCT-US95-10398-195	Sequence 195, App
16	571	89.4	319	3	US-08-836-075A-12	Sequence 12, Appl
17	571	89.4	319	4	US-08-635-886C-199	Sequence 199, App
18	571	89.4	319	4	US-08-974-690C-199	Sequence 199, App
19	570	89.2	191	2	US-08-290-665A-196	Sequence 196, App
20	570	89.2	191	5	PCT-US95-10398-196	Sequence 196, App
21	569	89.0	450	4	US-08-635-886C-181	Sequence 181, App
22	569	89.0	450	4	US-08-974-690C-181	Sequence 181, App
23	569	89.0	2894	2	US-08-466-975A-23	Sequence 23, Appl
24	569	89.0	2894	2	US-08-391-671A-23	Sequence 23, Appl
25	569	89.0	2894	3	US-08-467-902A-23	Sequence 23, Appl
26	569	89.0	2894	3	US-09-275-265-23	Sequence 23, Appl
27	569	89.0	2894	4	US-09-941-611-23	Sequence 23, Appl
28	568	88.9	182	4	US-10-104-966-2	Sequence 2, Appli
29	568	88.9	191	2	US-08-290-665A-156	Sequence 156, App
30	568	88.9	191	2	US-08-290-665A-157	Sequence 157, App
31	568	88.9	191	2	US-08-290-665A-158	Sequence 158, App
32	568	88.9	191	2	US-08-290-665A-159	Sequence 159, App
33	568	88.9	191	2	US-08-290-665A-160	Sequence 160, App
34	568	88.9	191	2	US-08-290-665A-191	Sequence 191, App
35	568	88.9	191	2	US-08-290-665A-197	Sequence 197, App
36	568	88.9	191	3	US-08-380-160-3	Sequence 3, Appli
37	568	88.9	191	5	PCT-US95-10398-156	Sequence 156, App
38	568	88.9	191	5	PCT-US95-10398-157	Sequence 157, App
39	568	88.9	191	5	PCT-US95-10398-158	Sequence 158, App
40	568	88.9	191	5	PCT-US95-10398-159	Sequence 159, App
41	568	88.9	191	5	PCT-US95-10398-160	Sequence 160, App
42	568	88.9	191	5	PCT-US95-10398-191	Sequence 191, App
43	568	88.9	191	5	PCT-US95-10398-197	Sequence 197, App
44	568	88.9	319	4	US-08-635-886C-217	Sequence 217, App
45	568	88.9	319	4	US-08-974-690C-217	Sequence 217, App

ALIGNMENTS

```
RESULT 1
US-08-836-075A-50
; Sequence 50, Application US/08836075A
; Patent No. 6180768
;  GENERAL INFORMATION:
;    APPLICANT:  MAERTENS, GEERT
;    APPLICANT:  STUYVER, LIEVEN
;    TITLE OF INVENTION:  NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;    TITLE OF INVENTION:  AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;    TITLE OF INVENTION:  AGENTS
;    NUMBER OF SEQUENCES:  207
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ARNOLD, WHITE & DURKEE
;      STREET:  P.O. BOX 4433
;      CITY:  HOUSTON
;      STATE:  TEXAS
;      COUNTRY:  USA
;      ZIP:  77210-4433
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  Microsoft Word 6.0 / ASCII text output
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/836,075A
;      FILING DATE:  21 Apr 1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/EP95/04155
;      FILING DATE:  23 Oct 1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 94870166.9
;      FILING DATE:  21 Oct 1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 95870076.7
;      FILING DATE:  28 Jun 1995
;    ATTORNEY/AGENT INFORMATION:
```

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;      NAME:  KAMMERER, PATRICIA A.
;      REGISTRATION NUMBER:  29,775
;      REFERENCE/DOCKET NUMBER:  INNS:004
;  INFORMATION FOR SEQ ID NO:  50:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  115 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-836-075A-50

Alignment Scores:
Pred. No.:                3.66e-50        Length:          115
Score:                    608.00          Matches:         114
Percent Similarity:       99.13%          Conservative:    0
Best Local Similarity:    99.13%          Mismatches:      1
Query Match:              95.15%          Indels:          1
DB:                       3               Gaps:            0

US-09-873-224A-147 (1-345) x US-08-836-075A-50 (1-115)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
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Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrAsn***ArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         41 GlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGlnProArgSer 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 2
US-08-290-665A-187
; Sequence 187, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  187:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  HK10
US-08-290-665A-187

Alignment Scores:
Pred. No.:                3.19e-48        Length:          191
Score:                    588.00          Matches:         108
Percent Similarity:       96.52%          Conservative:    3
Best Local Similarity:    93.91%          Mismatches:      4
Query Match:              92.02%          Indels:          1
DB:                       2               Gaps:            0

US-09-873-224A-147 (1-345) x US-08-290-665A-187 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
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Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 3
US-08-290-665A-188
; Sequence 188, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
```

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;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  188:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S52
US-08-290-665A-188

Alignment Scores:
Pred. No.:                3.19e-48      Length:          191
Score:                    588.00        Matches:         108
Percent Similarity:       96.52%        Conservative:    3
Best Local Similarity:    93.91%        Mismatches:      4
Query Match:              92.02%        Indels:          1
DB:                       2             Gaps:            0

US-09-873-224A-147 (1-345) x US-08-290-665A-188 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 4
US-08-290-665A-190
; Sequence 190, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  190:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  DK12
US-08-290-665A-190

Alignment Scores:
Pred. No.:                3.19e-48      Length:          191
Score:                    588.00        Matches:         108
Percent Similarity:       96.52%        Conservative:    3
Best Local Similarity:    93.91%        Mismatches:      4
Query Match:              92.02%        Indels:          1
DB:                       2             Gaps:            0

US-09-873-224A-147 (1-345) x US-08-290-665A-190 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 5
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PCT-US95-10398-187
; Sequence 187, Application PC/TUS9510398
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/10398
;       FILING DATE:  15-AUG-1995
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/086,428
;       FILING DATE:  29 JUNE 1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/290/665
;       FILING DATE:  15 AUGUST 1994
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  187:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  191 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  HK10
PCT-US95-10398-187

Alignment Scores:
Pred. No.:                3.19e-48        Length:         191
Score:                    588.00          Matches:        108
Percent Similarity:       96.52%          Conservative:   3
Best Local Similarity:    93.91%          Mismatches:     4
Query Match:              92.02%          Indels:         1
DB:                       5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-187 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||       |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 6
PCT-US95-10398-188
; Sequence 188, Application PC/TUS9510398
;  GENERAL INFORMATION:
;     APPLICANT:  BUKH, J., MILLER, R.H. AND
;     APPLICANT:  PURCELL, R.H.
;     TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;     TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;     TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;     TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;     TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;     NUMBER OF SEQUENCES:  263
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  MORGAN & FINNEGAN
;       STREET:  345 PARK AVENUE
;       CITY:  NEW YORK
;       STATE:  NEW YORK
;       COUNTRY:  USA
;       ZIP:  10154
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  FLOPPY DISK
;       COMPUTER:  IBM PC COMPATIBLE
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  WORDPERFECT 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/10398
;       FILING DATE:  15-AUG-1995
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/086,428
;       FILING DATE:  29 JUNE 1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/290/665
;       FILING DATE:  15 AUGUST 1994
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  RICHARD W. BORK
;       REGISTRATION NUMBER:  36,459
;       REFERENCE/DOCKET NUMBER:  2026-4116
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (212) 758-4800
;       TELEFAX:  (212) 751-6849
;       TELEX:  421792
;   INFORMATION FOR SEQ ID NO:  188:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  191 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     ORIGINAL SOURCE:
;       ORGANISM:  homosapiens
;       INDIVIDUAL ISOLATE:  S52
PCT-US95-10398-188

Alignment Scores:
Pred. No.:                3.19e-48        Length:         191
Score:                    588.00          Matches:        108
Percent Similarity:       96.52%          Conservative:   3
Best Local Similarity:    93.91%          Mismatches:     4
Query Match:              92.02%          Indels:         1
DB:                       5               Gaps:           0
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US-09-873-224A-147 (1-345) x PCT-US95-10398-188 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||:::|||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 7
PCT-US95-10398-190
; Sequence 190, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  190:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  DK12
PCT-US95-10398-190

Alignment Scores:
Pred. No.:                3.19e-48        Length:          191
Score:                    588.00          Matches:         108
Percent Similarity:       96.52%          Conservative:    3
Best Local Similarity:    93.91%          Mismatches:      4
Query Match:              92.02%          Indels:          1
DB:                       5               Gaps:            0

US-09-873-224A-147 (1-345) x PCT-US95-10398-190 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||:::|||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 8
US-08-290-665A-189
; Sequence 189, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
```

```
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  189:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
US-08-290-665A-189

Alignment Scores:
Pred. No.:                3.97e-48        Length:         191
Score:                    587.00          Matches:        107
Percent Similarity:       96.52%          Conservative:   4
Best Local Similarity:    93.04%          Mismatches:     4
Query Match:              91.86%          Indels:         1
DB:                       2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-189 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      ||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||:::||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspIleLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 9
PCT-US95-10398-189
; Sequence 189, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  189:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
PCT-US95-10398-189

Alignment Scores:
Pred. No.:                3.97e-48        Length:         191
Score:                    587.00          Matches:        107
Percent Similarity:       96.52%          Conservative:   4
Best Local Similarity:    93.04%          Mismatches:     4
Query Match:              91.86%          Indels:         1
DB:                       5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-189 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAA-CCCCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||      ||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrIleArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||:::||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspIleLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 10
US-08-290-665A-192
; Sequence 192, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
```

```
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  192:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z8
US-08-290-665A-192

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-192 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   |||||||||||||||||||||||||||||||||||   ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 11
US-08-290-665A-193
; Sequence 193, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  193:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z1
US-08-290-665A-193

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-193 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   |||||||||||||||||||||||||||||||||||   ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaAlaArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80
```

```
Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 12
US-08-290-665A-195
; Sequence 195, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  195:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z6
US-08-290-665A-195

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     2               Gaps:           0

US-09-873-224A-147 (1-345) x US-08-290-665A-195 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              ||||||||  ||||||||||||||||||||||||||||||||||||||  ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||  ||||||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 13
PCT-US95-10398-192
; Sequence 192, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  192:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z8
PCT-US95-10398-192

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
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Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-192 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||   ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 14
PCT-US95-10398-193
; Sequence 193, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  193:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z1
PCT-US95-10398-193

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-193 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||   ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaAlaArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||:::|||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 15
PCT-US95-10398-195
; Sequence 195, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
```

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;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  195:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  191 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z6
PCT-US95-10398-195

Alignment Scores:
Pred. No.:              6.88e-47        Length:         191
Score:                  574.00          Matches:        106
Percent Similarity:     95.65%          Conservative:   4
Best Local Similarity:  92.17%          Mismatches:     5
Query Match:            89.83%          Indels:         1
DB:                     5               Gaps:           0

US-09-873-224A-147 (1-345) x PCT-US95-10398-195 (1-191)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||||   ||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProMet 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||:::||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgSerGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115


Search completed: February 25, 2004, 01:27:33
Job time : 19.5 secs
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GenCore version 5.1.6

OM nucleic - protein search, using frame_plus_n2p model

Run on: February 25, 2004, 01:24:56 ; Search time 33 Seconds
(without alignments)
4415.023 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 639
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 809742 seqs, 211153259 residues

Total number of hits satisfying chosen parameters: 1619484

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
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-Q=/cgn2_1/USPTO_spool_p/US09873224/runat_24022004_132652_9839/app_query.fasta_1.519
-DB=Published_Applications_AA -QFMT=fastan -SUFFIX=rapb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US09873224_@CGN_1_1_53_@runat_24022004_132652_9839
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published_Applications_AA:*
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
6: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep:*
7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/2/pubpaa/US09A_PUBCOMB.pep:*
10: /cgn2_6/ptodata/2/pubpaa/US09B_PUBCOMB.pep:*
11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*
14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	608	95.1	115	9	US-09-851-138-50	Sequence 50, Appl
2	608	95.1	115	10	US-09-899-046-148	Sequence 148, App
3	608	95.1	115	10	US-09-878-281-148	Sequence 148, App
4	575	90.0	235	15	US-10-365-620-58	Sequence 58, Appl
5	575	90.0	249	15	US-10-365-620-54	Sequence 54, Appl
6	575	90.0	459	15	US-10-365-620-60	Sequence 60, Appl
7	575	90.0	473	15	US-10-365-620-56	Sequence 56, Appl
8	571	89.4	130	14	US-10-268-569-19	Sequence 19, Appl
9	571	89.4	319	9	US-09-851-138-12	Sequence 12, Appl
10	569	89.0	2894	9	US-09-941-611-23	Sequence 23, Appl
11	569	89.0	2894	14	US-10-044-995-23	Sequence 23, Appl
12	568	88.9	151	14	US-10-292-129-14	Sequence 14, Appl
13	568	88.9	182	9	US-09-929-955-2	Sequence 2, Appli
14	568	88.9	182	13	US-10-104-966-2	Sequence 2, Appli
15	568	88.9	3011	9	US-09-742-659-4	Sequence 4, Appli
16	568	88.9	3011	9	US-09-952-572-9	Sequence 9, Appli
17	568	88.9	3011	9	US-09-929-955-1	Sequence 1, Appli
18	568	88.9	3011	9	US-09-747-419-20	Sequence 20, Appl
19	568	88.9	3011	10	US-09-891-894-3	Sequence 3, Appli
20	568	88.9	3011	13	US-10-104-966-1	Sequence 1, Appli
21	568	88.9	3011	14	US-10-259-275-20	Sequence 20, Appl
22	568	88.9	3011	14	US-10-184-150-3	Sequence 3, Appli
23	568	88.9	3011	15	US-10-328-997-3	Sequence 3, Appli
24	568	88.9	3012	9	US-09-238-076-2	Sequence 2, Appli
25	568	88.9	3012	10	US-09-995-937-2	Sequence 2, Appli
26	568	88.9	3012	10	US-09-917-563-2	Sequence 2, Appli
27	567	88.7	117	9	US-09-851-138-28	Sequence 28, Appl
28	567	88.7	424	14	US-10-173-480-28	Sequence 28, Appl
29	566	88.6	166	10	US-09-899-046-194	Sequence 194, App
30	566	88.6	166	10	US-09-878-281-194	Sequence 194, App
31	564	88.3	166	10	US-09-899-046-164	Sequence 164, App
32	564	88.3	166	10	US-09-878-281-164	Sequence 164, App
33	564	88.3	3011	9	US-09-238-076-20	Sequence 20, Appl
34	564	88.3	3011	10	US-09-995-937-20	Sequence 20, Appl
35	564	88.3	3011	10	US-09-917-563-20	Sequence 20, Appl
36	562	87.9	319	9	US-09-851-138-44	Sequence 44, Appl
37	561	87.8	2985	14	US-10-259-275-40	Sequence 40, Appl
38	560	87.6	190	14	US-10-268-562-1	Sequence 1, Appli
39	560	87.6	191	10	US-09-194-949-3	Sequence 3, Appli
40	560	87.6	3011	9	US-09-916-359-2	Sequence 2, Appli
41	558	87.3	113	9	US-09-921-397-78	Sequence 78, Appl
42	558	87.3	319	9	US-09-851-138-42	Sequence 42, Appl
43	558	87.3	809	9	US-09-973-025-50	Sequence 50, Appl
44	558	87.3	809	10	US-09-899-303-50	Sequence 50, Appl
45	558	87.3	809	10	US-09-995-808-50	Sequence 50, Appl

ALIGNMENTS

RESULT 1
US-09-851-138-50
; Sequence 50, Application US/09851138
; Publication No. US20020183508A1
; GENERAL INFORMATION:
; APPLICANT: MAERTENS, GEERT
; STUYVER, LIEVEN
; TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
; AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
; AGENTS
; NUMBER OF SEQUENCES: 207
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ARNOLD, WHITE & DURKEE
; STREET: P.O. BOX 4433
; CITY: HOUSTON
; STATE: TEXAS
; COUNTRY: USA
; ZIP: 77210-4433
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Microsoft Word 6.0 / ASCII text output
; CURRENT APPLICATION DATA:

```
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;       PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;       ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 50:
;       SEQUENCE CHARACTERISTICS:
;             LENGTH: 115 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       SEQUENCE DESCRIPTION: SEQ ID NO: 50:
US-09-851-138-50

Alignment Scores:
Pred. No.:                4.18e-46       Length:          115
Score:                    608.00         Matches:         114
Percent Similarity:       99.13%         Conservative:    0
Best Local Similarity:    99.13%         Mismatches:      1
Query Match:              95.15%         Indels:          1
DB:                       9              Gaps:            0

US-09-873-224A-147 (1-345) x US-09-851-138-50 (1-115)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
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Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrAsn***ArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         41 GlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGlnProArgSer 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 2
US-09-899-046-148
; Sequence 148, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  148:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  115 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-899-046-148

Alignment Scores:
Pred. No.:                4.18e-46       Length:          115
Score:                    608.00         Matches:         114
Percent Similarity:       99.13%         Conservative:    0
Best Local Similarity:    99.13%         Mismatches:      1
Query Match:              95.15%         Indels:          1
DB:                       10             Gaps:            0

US-09-873-224A-147 (1-345) x US-09-899-046-148 (1-115)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||||| |||||||||
Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrAsn***ArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         41 GlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGlnProArgSer 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 3
US-09-878-281-148
; Sequence 148, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  148:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  115 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-878-281-148
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Alignment Scores:
Pred. No.:              4.18e-46        Length:         115
Score:                  608.00          Matches:        114
Percent Similarity:     99.13%          Conservative:   0
Best Local Similarity:  99.13%          Mismatches:     1
Query Match:            95.15%          Indels:         1
DB:                     10              Gaps:           0

US-09-873-224A-147 (1-345) x US-09-878-281-148 (1-115)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
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Db          1 MetSerThrLeuProLysProGlnArgLysThrLysArgAsnThrAsn***ArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrValLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         41 GlyProGlnLeuGlyValArgAlaValArgLysThrSerGluArgSerGlnProArgSer 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ArgArgGlnProIleProArgAlaArgArgThrGluGlyArgSerTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||||||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 4
US-10-365-620-58
; Sequence 58, Application US/10365620
; Publication No. US20040001853A1
; GENERAL INFORMATION:
;  APPLICANT: George, Rajan
;  APPLICANT:  Tyrrell, Lorne
;  APPLICANT:  No. US20040001853A1jaim, Antoine
;  TITLE OF INVENTION: Chimeric Antigens for Eliciting An Immune Response
;  FILE REFERENCE: 656.0016
;  CURRENT APPLICATION NUMBER: US/10/365,620
;  CURRENT FILING DATE:  2003-02-13
;  PRIOR APPLICATION NUMBER: US60/423,578
;  PRIOR FILING DATE: 2003-11-05
;  PRIOR APPLICATION NUMBER: 60/390,564
;  PRIOR FILING DATE: 2002-06-20
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 58
;   LENGTH: 235
;   TYPE: PRT
;   ORGANISM: HCV Core
US-10-365-620-58

Alignment Scores:
Pred. No.:              3.9e-43         Length:         235
Score:                  575.00          Matches:        105
Percent Similarity:     94.78%          Conservative:   4
Best Local Similarity:  91.30%          Mismatches:     6
Query Match:            89.98%          Indels:         1
DB:                     15              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-365-620-58 (1-235)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   |||||||||||||||||||||||||||||||||||   |||||||||
Db         31 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 50

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||||||||||||||||||||||||||||||||||||||:::|||||||||||
Db         51 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 70

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||||
Db         71 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 90

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||   |||||||||:::|||||||||||||||
Db         91 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 110

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        111 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 130

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||   |||||||||||||||
Db        131 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 145

RESULT 5
US-10-365-620-54
; Sequence 54, Application US/10365620
; Publication No. US20040001853A1
; GENERAL INFORMATION:
;  APPLICANT: George, Rajan
;  APPLICANT:  Tyrrell, Lorne
;  APPLICANT:  No. US20040001853A1jaim, Antoine
;  TITLE OF INVENTION: Chimeric Antigens for Eliciting An Immune Response
;  FILE REFERENCE: 656.0016
;  CURRENT APPLICATION NUMBER: US/10/365,620
;  CURRENT FILING DATE:  2003-02-13
;  PRIOR APPLICATION NUMBER: US60/423,578
;  PRIOR FILING DATE: 2003-11-05
;  PRIOR APPLICATION NUMBER: 60/390,564
;  PRIOR FILING DATE: 2002-06-20
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 54
;   LENGTH: 249
;   TYPE: PRT
;   ORGANISM: ORF of HCV Core Protein
US-10-365-620-54

Alignment Scores:
Pred. No.:              3.91e-43        Length:         249
Score:                  575.00          Matches:        105
Percent Similarity:     94.78%          Conservative:   4
Best Local Similarity:  91.30%          Mismatches:     6
Query Match:            89.98%          Indels:         1
DB:                     15              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-365-620-54 (1-249)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   |||||||||||||||||||||||||||||||||||   |||||||||
Db         31 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 50

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||||||||||||||||||||||||||||||||||||||:::|||||||||||
Db         51 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 70

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||||
Db         71 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 90

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||   |||||||||:::|||||||||||||||
Db         91 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 110

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        111 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 130
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Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||  ||||||||||||||||
Db        131 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 145

RESULT 6
US-10-365-620-60
; Sequence 60, Application US/10365620
; Publication No. US20040001853A1
; GENERAL INFORMATION:
;  APPLICANT: George, Rajan
;  APPLICANT:  Tyrrell, Lorne
;  APPLICANT:  No. US20040001853A1jaim, Antoine
;  TITLE OF INVENTION: Chimeric Antigens for Eliciting An Immune Response
;  FILE REFERENCE: 656.0016
;  CURRENT APPLICATION NUMBER: US/10/365,620
;  CURRENT FILING DATE:  2003-02-13
;  PRIOR APPLICATION NUMBER: US60/423,578
;  PRIOR FILING DATE: 2003-11-05
;  PRIOR APPLICATION NUMBER: 60/390,564
;  PRIOR FILING DATE: 2002-06-20
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 60
;   LENGTH: 459
;   TYPE: PRT
;   ORGANISM: HCV Core-TBD protein
US-10-365-620-60

Alignment Scores:
Pred. No.:                4.07e-43        Length:         459
Score:                    575.00          Matches:        105
Percent Similarity:       94.78%          Conservative:   4
Best Local Similarity:    91.30%          Mismatches:     6
Query Match:              89.98%          Indels:         1
DB:                       15              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-365-620-60 (1-459)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db         31 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 50

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
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Db         51 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 70

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         71 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 90

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||   |||||||||:::||||||||||||||||
Db         91 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 110

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        111 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 130

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||  ||||||||||||||||
Db        131 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 145

RESULT 7
US-10-365-620-56
; Sequence 56, Application US/10365620
; Publication No. US20040001853A1
; GENERAL INFORMATION:
;  APPLICANT: George, Rajan
;  APPLICANT:  Tyrrell, Lorne
;  APPLICANT:  No. US20040001853A1jaim, Antoine
;  TITLE OF INVENTION: Chimeric Antigens for Eliciting An Immune Response
;  FILE REFERENCE: 656.0016
;  CURRENT APPLICATION NUMBER: US/10/365,620
;  CURRENT FILING DATE:  2003-02-13
;  PRIOR APPLICATION NUMBER: US60/423,578
;  PRIOR FILING DATE: 2003-11-05
;  PRIOR APPLICATION NUMBER: 60/390,564
;  PRIOR FILING DATE: 2002-06-20
;  NUMBER OF SEQ ID NOS: 76
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 56
;   LENGTH: 473
;   TYPE: PRT
;   ORGANISM: ORF of HCV Core-TBD protein
US-10-365-620-56

Alignment Scores:
Pred. No.:                4.08e-43        Length:         473
Score:                    575.00          Matches:        105
Percent Similarity:       94.78%          Conservative:   4
Best Local Similarity:    91.30%          Mismatches:     6
Query Match:              89.98%          Indels:         1
DB:                       15              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-365-620-56 (1-473)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db         31 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 50

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         51 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 70

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         71 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 90

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||   |||||||||:::||||||||||||||||
Db         91 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 110

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        111 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 130

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||  ||||||||||||||||
Db        131 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 145

RESULT 8
US-10-268-569-19
; Sequence 19, Application US/10268569
; Publication No. US20030152965A1
; GENERAL INFORMATION:
;  APPLICANT: Ortho-Clinical Diagnostics, Inc.
;  TITLE OF INVENTION: HCV Core Protein Sequences
;  FILE REFERENCE: CDS-0288
;  CURRENT APPLICATION NUMBER: US/10/268,569
;  CURRENT FILING DATE:  2002-10-10
;  PRIOR APPLICATION NUMBER: 60/347,303
;  PRIOR FILING DATE: 2001-11-11
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 19
;   LENGTH: 130
;   TYPE: PRT
;   ORGANISM: Hepatitis C virus
US-10-268-569-19

Alignment Scores:
Pred. No.:                8.55e-43        Length:         130
Score:                    571.00          Matches:        106
Percent Similarity:       94.78%          Conservative:   3
Best Local Similarity:    92.17%          Mismatches:     6
Query Match:              89.36%          Indels:         1
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DB:                 14              Gaps:           0

US-09-873-224A-147 (1-345) x US-10-268-569-19 (1-130)

Qy           1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
               |||||||||   |||||||||||||||||||||||||||||||||||   |||||||||
Db           1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy          60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
               ||||||||||||||||||||||||||||||||||||||||||||||:::|||||||||||||
Db          21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy         120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
               ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db          41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy         180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
               |||||||||||||||||:::|||||||||   |||||||||||||||||||||||||||||
Db          61 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgSerTrpAlaGlnProGly 80

Qy         240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy         300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
               ||||||||||||||||||||||||||   ||||||||||||||
Db         101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115

RESULT 9
US-09-851-138-12
; Sequence 12, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 12:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 319 amino acids
;             TYPE: amino acid
;             TOPOLOGY: linear
;        MOLECULE TYPE: peptide
;        SEQUENCE DESCRIPTION: SEQ ID NO: 12:
US-09-851-138-12

Alignment Scores:
Pred. No.:              9.06e-43        Length:         319
Score:                  571.00          Matches:        106
Percent Similarity:     94.78%          Conservative:   3
Best Local Similarity:  92.17%          Mismatches:     6
Query Match:            89.36%          Indels:         1
DB:                     9               Gaps:           0

US-09-873-224A-147 (1-345) x US-09-851-138-12 (1-319)

Qy           1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
               |||||||||   |||||||||||||||||||||||||||||||||||   |||||||||
Db           1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy          60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
               ||||||||||||||||||||||||||||||||||||||||||||||:::|||||||||||||
Db          21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy         120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
               ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db          41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy         180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
               |||||||||||||||||:::|||||||||   |||||||||||||||||||||||||||||
Db          61 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgSerTrpAlaGlnProGly 80

Qy         240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
               ||||||||||||||||||   |||||||||||||||||||||||||||||||||||||||
Db          81 TyrProTrpProLeuTyrAlaAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy         300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
               ||||||||||||||||||||||||||||||||||||||||||||
Db         101 ArgGlySerArgProSerTrpGlyProAsnAspProArgArgArg 115

RESULT 10
US-09-941-611-23
; Sequence 23, Application US/09941611
; Patent No. US20020106640A1
;   GENERAL INFORMATION:
;        APPLICANT: DELEYS, ROBERT J
;                   POLLET, DIRK
;                   MAERTENS, GEERT
;                   VAN HEUVERSWUN, HUGO
;        TITLE OF INVENTION: SYNTHETIC ANTIGENS FOR THE DETECTION OF
;                            ANTIBODIES TO HEPATITIS C VIRUS
;        NUMBER OF SEQUENCES: 23
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: NIXON & VANDERHYE P.C.
;             STREET: 1100 NORTH GLEBE ROAD
;             CITY: ARLINGTON
;             STATE: VA
;             COUNTRY: USA
;             ZIP: 22201
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/941,611
;             FILING DATE: 30-Aug-2001
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/391,671
;             FILING DATE: 1995-02-21
;             APPLICATION NUMBER: WO PCT/EP91/02409
;             FILING DATE: 13-DEC-1991
;             APPLICATION NUMBER: EP 90124241.2
;             FILING DATE: 14-DEC-1990
;        ATTORNEY/AGENT INFORMATION:
;             NAME: SADOFF, B.J.
;             REGISTRATION NUMBER: 36,663
```

```
;             REFERENCE/DOCKET NUMBER: 1487-5
;          TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 7038164000
;             TELEFAX: 7038164100
;    INFORMATION FOR SEQ ID NO: 23:
;          SEQUENCE CHARACTERISTICS:
;             LENGTH: 2894 amino acids
;             TYPE: amino acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;          MOLECULE TYPE: peptide
;          HYPOTHETICAL: NO
;          ANTI-SENSE: NO
;          SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-09-941-611-23

Alignment Scores:
Pred. No.:                1.57e-42        Length:          2894
Score:                    569.00          Matches:         104
Percent Similarity:       94.78%          Conservative:    5
Best Local Similarity:    90.43%          Mismatches:      6
Query Match:              89.05%          Indels:          1
DB:                       9               Gaps:            0

US-09-873-224A-147 (1-345) x US-09-941-611-23 (1-2894)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||:::|||||||||||||||||||||||||||||||||||   |||||||||
Db          1 MetSerThrIleProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::   ||||||   |||||||||:::|||||||||||||||
Db         61 ArgArgGlnProIleProLysValArgArgProGluGlyArgThrTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||   |||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115

RESULT 11
US-10-044-995-23
; Sequence 23, Application US/10044995
; Publication No. US20030049685A1
;   GENERAL INFORMATION:
;        APPLICANT: DELEYS, ROBERT J
;                   POLLET, DIRK
;                   MAERTENS, GEERT
;                   VAN HEUVERSWUN, HUGO
;        TITLE OF INVENTION: SYNTHETIC ANTIGENS FOR THE DETECTION OF
;                            ANTIBODIES TO HEPATITIS C VIRUS
;        NUMBER OF SEQUENCES: 23
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: NIXON & VANDERHYE P.C.
;             STREET: 1100 NORTH GLEBE ROAD
;             CITY: ARLINGTON
;             STATE: VA
;             COUNTRY: USA
;             ZIP: 22201
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/10/044,995
;             FILING DATE: 15-Jan-2002
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/391,671
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: US 07/920,286
;             FILING DATE: 14-OCT-1992
;             APPLICATION NUMBER: WO PCT/EP91/02409
;             FILING DATE: 13-DEC-1991
;             APPLICATION NUMBER: EP 90124241.2
;             FILING DATE: 14-DEC-1990
;        ATTORNEY/AGENT INFORMATION:
;             NAME: SADOFF, B.J.
;             REGISTRATION NUMBER: 36,663
;             REFERENCE/DOCKET NUMBER: 1487-5
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 7038164000
;             TELEFAX: 7038164100
;    INFORMATION FOR SEQ ID NO: 23:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 2894 amino acids
;             TYPE: amino acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: peptide
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-10-044-995-23

Alignment Scores:
Pred. No.:                1.57e-42        Length:          2894
Score:                    569.00          Matches:         104
Percent Similarity:       94.78%          Conservative:    5
Best Local Similarity:    90.43%          Mismatches:      6
Query Match:              89.05%          Indels:          1
DB:                       14              Gaps:            0

US-09-873-224A-147 (1-345) x US-10-044-995-23 (1-2894)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              ||||||||||:::|||||||||||||||||||||||||||||||||||   |||||||||
Db          1 MetSerThrIleProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   |||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::   ||||||   |||||||||:::|||||||||||||||
Db         61 ArgArgGlnProIleProLysValArgArgProGluGlyArgThrTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||   |||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115

RESULT 12
US-10-292-129-14
; Sequence 14, Application US/10292129
; Publication No. US20030148267A1
; GENERAL INFORMATION:
;  APPLICANT: Schmidt, Emmett Vance
```

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;  APPLICANT:  Chung, Raymond Taeyong
;  TITLE OF INVENTION: SCREENING ASSAY FOR HEPATITIS C VIRUS
;  TITLE OF INVENTION:  ANTIVIRAL AGENTS
;  FILE REFERENCE: 00786-539001
;  CURRENT APPLICATION NUMBER: US/10/292,129
;  CURRENT FILING DATE:  2002-11-08
;  PRIOR APPLICATION NUMBER: US 60/345,405
;  PRIOR FILING DATE: 2001-11-09
;  NUMBER OF SEQ ID NOS: 17
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14
;   LENGTH: 151
;   TYPE: PRT
;   ORGANISM: Hepatitis C virus
US-10-292-129-14

Alignment Scores:
Pred. No.:              1.6e-42       Length:          151
Score:                  568.00        Matches:         105
Percent Similarity:     94.78%        Conservative:    4
Best Local Similarity:  91.30%        Mismatches:      6
Query Match:            88.89%        Indels:          1
DB:                     14            Gaps:            0

US-09-873-224A-147 (1-345) x US-10-292-129-14 (1-151)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||:::|||||||||   |||||||||:::|||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||   |||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115

RESULT 13
US-09-929-955-2
; Sequence 2, Application US/09929955
; Patent No. US20020136740A1
; GENERAL INFORMATION:
;  APPLICANT: Matti Sallberg
;  APPLICANT:  Catharina Hultgren
;  TITLE OF INVENTION: VACCINES CONTAINING RIBAVIRIN AND
;  TITLE OF INVENTION:  METHODS OF USE THEREOF
;  FILE REFERENCE: TRIPEP.23AUS2
;  CURRENT APPLICATION NUMBER: US/09/929,955
;  CURRENT FILING DATE:  2001-08-15
;  PRIOR APPLICATION NUMBER: 09/705,547
;  PRIOR FILING DATE: 2000-11-03
;  PRIOR APPLICATION NUMBER: 60/229,175
;  PRIOR FILING DATE: 2000-08-29
;  PRIOR APPLICATION NUMBER: 60/225,767
;  PRIOR FILING DATE: 2000-08-17
;  NUMBER OF SEQ ID NOS: 49
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
;   LENGTH: 182
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Hepatitis C virus core protein sequence
US-09-929-955-2

Alignment Scores:
Pred. No.:              1.62e-42      Length:          182
Score:                  568.00        Matches:         105
Percent Similarity:     94.78%        Conservative:    4
Best Local Similarity:  91.30%        Mismatches:      6
Query Match:            88.89%        Indels:          1
DB:                     9             Gaps:            0

US-09-873-224A-147 (1-345) x US-09-929-955-2 (1-182)

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||   |||||||||:::|||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||||||||||||||||||   |||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115

RESULT 14
US-10-104-966-2
; Sequence 2, Application US/10104966
; Publication No. US20020155124A1
; GENERAL INFORMATION:
;  APPLICANT: Matti Sallberg
;  APPLICANT:  Catharina Hultgren
;  TITLE OF INVENTION: VACCINES CONTAINING RIBAVIRIN AND
;  TITLE OF INVENTION:  METHODS OF USE THEREOF
;  FILE REFERENCE: TRIPEP.23AUSC1
;  CURRENT APPLICATION NUMBER: US/10/104,966
;  CURRENT FILING DATE:  2002-03-22
;  PRIOR APPLICATION NUMBER: 09/705,547
;  PRIOR FILING DATE: 2000-11-03
;  PRIOR APPLICATION NUMBER: 60/229,175
;  PRIOR FILING DATE: 2000-08-29
;  NUMBER OF SEQ ID NOS: 15
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
;   LENGTH: 182
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Hepatitis C virus core protein sequence
US-10-104-966-2

Alignment Scores:
Pred. No.:              1.62e-42      Length:          182
Score:                  568.00        Matches:         105
Percent Similarity:     94.78%        Conservative:    4
Best Local Similarity:  91.30%        Mismatches:      6
Query Match:            88.89%        Indels:          1
DB:                     13            Gaps:            0
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US-09-873-224A-147 (1-345) x US-10-104-966-2 (1-182)

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Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCC-CGGCCACAG 59
              |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||   |||||||||:::||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||   ||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115
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RESULT 15
US-09-742-659-4
; Sequence 4, Application US/09742659
; Patent No. US20010034019A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Zhi
; APPLICANT: Butkiewicz, Nancy J.
; APPLICANT: Zhong, Weidong
; APPLICANT: Ingravallo, Paul
; APPLICANT: Wright-Minogue, Jacquelyn
; APPLICANT: Lau, Johnson Y.
; APPLICANT: Lemon, Stanley M.
; TITLE OF INVENTION: Chimeric HCV/GBV-B viruses
; FILE REFERENCE: ID01116
; CURRENT APPLICATION NUMBER: US/09/742,659
; CURRENT FILING DATE: 2000-12-21
; PRIOR APPLICATION NUMBER: US 60/171,469
; PRIOR FILING DATE: 1999-12-22
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 3011
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-742-659-4

Alignment Scores:

Pred. No.:	1.94e-42	Length:	3011
Score:	568.00	Matches:	105
Percent Similarity:	94.78%	Conservative:	4
Best Local Similarity:	91.30%	Mismatches:	6
Query Match:	88.89%	Indels:	1
DB:	9	Gaps:	0

US-09-873-224A-147 (1-345) x US-09-742-659-4 (1-3011)

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              |||||||||   ||||||||||||||||||||||||||||||||||||   |||||||||
Db          1 MetSerThrAsnProLysProGlnArgLysThrLysArgAsnThrAsnArgArgProGln 20

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         21 AspValLysPheProGlyGlyGlyGlnIleValGlyGlyValTyrLeuLeuProArgArg 40

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||:::|||||||||||||||   ||||||||||||||||||||||||||||||||
Db         41 GlyProArgLeuGlyValArgAlaThrArgLysThrSerGluArgSerGlnProArgGly 60

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||:::|||||||||   |||||||||:::||||||||||||||||
Db         61 ArgArgGlnProIleProLysAlaArgArgProGluGlyArgThrTrpAlaGlnProGly 80

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         81 TyrProTrpProLeuTyrGlyAsnGluGlyCysGlyTrpAlaGlyTrpLeuLeuSerPro 100

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||||||||||||||||||||   ||||||||||||||||
Db        101 ArgGlySerArgProSerTrpGlyProThrAspProArgArgArg 115
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Search completed: February 25, 2004, 01:35:45
Job time : 45 secs

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 27, 2004, 10:59:35 ; Search time 80 Seconds
(without alignments)
2393.226 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 345
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
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2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	309	89.6	309	3	US-08-836-075A-49	Sequence 49, Appl
2	261.6	75.8	652	3	US-08-836-075A-59	Sequence 59, Appl
3	259.4	75.2	573	2	US-08-290-665A-136	Sequence 136, App
4	259.4	75.2	573	4	US-09-194-949A-5	Sequence 5, Appli
5	259.4	75.2	573	5	PCT-US95-10398-136	Sequence 136, App
6	257.8	74.7	573	2	US-08-290-665A-141	Sequence 141, App
7	257.8	74.7	573	5	PCT-US95-10398-141	Sequence 141, App
8	257.8	74.7	803	1	US-08-157-235-4	Sequence 4, Appli
9	257.8	74.7	803	1	US-08-157-235-5	Sequence 5, Appli
10	256.2	74.3	573	2	US-08-290-665A-135	Sequence 135, App
11	256.2	74.3	573	2	US-08-290-665A-137	Sequence 137, App
12	256.2	74.3	573	2	US-08-290-665A-138	Sequence 138, App
13	256.2	74.3	573	5	PCT-US95-10398-135	Sequence 135, App
14	256.2	74.3	573	5	PCT-US95-10398-137	Sequence 137, App
15	256.2	74.3	573	5	PCT-US95-10398-138	Sequence 138, App
16	256.2	74.3	1037	1	US-08-462-195-1	Sequence 1, Appli
17	256.2	74.3	1037	2	US-08-636-883-1	Sequence 1, Appli
18	256.2	74.3	1037	3	US-09-127-829-1	Sequence 1, Appli
19	254.6	73.8	573	2	US-08-290-665A-107	Sequence 107, App
20	254.6	73.8	573	2	US-08-290-665A-114	Sequence 114, App
21	254.6	73.8	573	2	US-08-290-665A-119	Sequence 119, App
22	254.6	73.8	573	5	PCT-US95-10398-107	Sequence 107, App
23	254.6	73.8	573	5	PCT-US95-10398-114	Sequence 114, App
24	254.6	73.8	573	5	PCT-US95-10398-119	Sequence 119, App
25	254.6	73.8	803	1	US-08-157-235-2	Sequence 2, Appli
26	253.6	73.5	573	2	US-08-290-665A-139	Sequence 139, App
27	253.6	73.5	573	5	PCT-US95-10398-139	Sequence 139, App
28	253.6	73.5	803	1	US-08-157-235-6	Sequence 6, Appli
29	253	73.3	573	2	US-08-290-665A-113	Sequence 113, App
30	253	73.3	573	5	PCT-US95-10398-113	Sequence 113, App
31	253	73.3	803	1	US-08-157-235-1	Sequence 1, Appli
32	253	73.3	1539	2	US-08-470-426B-17	Sequence 17, Appl
33	253	73.3	1863	2	US-08-470-426B-14	Sequence 14, Appl
34	253	73.3	2433	3	US-08-612-973-49	Sequence 49, Appl
35	253	73.3	2433	3	US-08-927-597-49	Sequence 49, Appl
36	251.4	72.9	345	1	US-08-324-977-7	Sequence 7, Appli
37	251.4	72.9	345	2	US-08-384-616-7	Sequence 7, Appli
38	251.4	72.9	345	2	US-08-904-686A-7	Sequence 7, Appli
39	251.4	72.9	345	3	US-09-315-850-7	Sequence 7, Appli
40	251.4	72.9	573	2	US-08-290-665A-108	Sequence 108, App
41	251.4	72.9	573	5	PCT-US95-10398-108	Sequence 108, App
42	251.4	72.9	803	1	US-08-157-235-3	Sequence 3, Appli
43	251.4	72.9	1167	1	US-08-324-977-9	Sequence 9, Appli
44	251.4	72.9	1167	2	US-08-384-616-9	Sequence 9, Appli
45	251.4	72.9	1167	2	US-08-904-686A-9	Sequence 9, Appli

ALIGNMENTS

```
RESULT 1
US-08-836-075A-49
; Sequence 49, Application US/08836075A
; Patent No. 6180768
;  GENERAL INFORMATION:
;    APPLICANT:  MAERTENS, GEERT
;    APPLICANT:  STUYVER, LIEVEN
;    TITLE OF INVENTION:  NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;    TITLE OF INVENTION:  AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;    TITLE OF INVENTION:  AGENTS
;    NUMBER OF SEQUENCES:  207
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ARNOLD, WHITE & DURKEE
;      STREET:  P.O. BOX 4433
;      CITY:  HOUSTON
;      STATE:  TEXAS
;      COUNTRY:  USA
;      ZIP:  77210-4433
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  Microsoft Word 6.0 / ASCII text output
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/836,075A
;      FILING DATE:  21 Apr 1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/EP95/04155
;      FILING DATE:  23 Oct 1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 94870166.9
;      FILING DATE:  21 Oct 1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  EP 95870076.7
;      FILING DATE:  28 Jun 1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  KAMMERER, PATRICIA A.
;      REGISTRATION NUMBER:  29,775
;      REFERENCE/DOCKET NUMBER:  INNS:004
;  INFORMATION FOR SEQ ID NO:  49:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  309 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-836-075A-49
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  Query Match             89.6%;  Score 309;  DB 3;  Length 309;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-78;
  Matches  309;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
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Db        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300

Qy        301 GCGGCTCTC 309
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Db        301 GCGGCTCTC 309
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RESULT 2
US-08-836-075A-59
; Sequence 59, Application US/08836075A
; Patent No. 6180768
; GENERAL INFORMATION:
; APPLICANT: MAERTENS, GEERT
; APPLICANT: STUYVER, LIEVEN
; TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
; TITLE OF INVENTION: AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
; TITLE OF INVENTION: AGENTS
; NUMBER OF SEQUENCES: 207
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ARNOLD, WHITE & DURKEE
; STREET: P.O. BOX 4433
; CITY: HOUSTON
; STATE: TEXAS
; COUNTRY: USA
; ZIP: 77210-4433
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Microsoft Word 6.0 / ASCII text output
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/836,075A
; FILING DATE: 21 Apr 1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/EP95/04155
; FILING DATE: 23 Oct 1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 94870166.9
; FILING DATE: 21 Oct 1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 95870076.7
; FILING DATE: 28 Jun 1995
; ATTORNEY/AGENT INFORMATION:
; NAME: KAMMERER, PATRICIA A.
; REGISTRATION NUMBER: 29,775
; REFERENCE/DOCKET NUMBER: INNS:004
; INFORMATION FOR SEQ ID NO: 59:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
US-08-836-075A-59

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  Query Match             75.8%;  Score 261.6;  DB 3;  Length 652;
  Best Local Similarity   86.7%;  Pred. No. 5.7e-65;
  Matches  299;  Conservative    0;  Mismatches   45;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
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Db        239 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAAAGAAACACCAACCGCCGCCCACAG 298

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||  |||||||| |||||  || ||||||||||||||||| |||||||||| ||||||
Db        299 GACGTCAAGTTCCCGGGCGGTGGCCAGATCGTTGGTGGAGTCTACGTGCTACCGCGCAGG 358

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||     |||||||||||| |||| ||| |||||||| ||||||||||||||||  |
Db        359 GGCCCTAGATTGGGTGTGCGCGCAGCGCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 418

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| || |||| || ||||||| ||||||||||||||||||| |||||||||
Db        419 AGGCGCCAACCTATTCCCAAGGAGCGCCGACCCGAGGGCAGGTCCTGGGCGCAGCCCGGG 478

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||| |||||||| ||||| || ||||||||||||||||||  ||||||||||||
Db        479 TACCCCTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGTNGGCTCCTGTCCCCT 538

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || ||    ||||| || | |||||||||||| |||
Db        539 CGCGGCTCCCGTCCTAGTTGGGGTCCTACTGACCCCCGGCGTAGG 583
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RESULT 3
US-08-290-665A-136
; Sequence 136, Application US/08290665A
; Patent No. 5882852
; GENERAL INFORMATION:
; APPLICANT: BUKH, J., MILLER, R.H. AND
; APPLICANT: PURCELL, R.H.
; TITLE OF INVENTION: NUCLEOTIDE AND DEDUCED
; TITLE OF INVENTION: AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
; TITLE OF INVENTION: CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
; TITLE OF INVENTION: AND THE USE OF REAGENTS DERIVED FROM THESE
; TITLE OF INVENTION: SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
; NUMBER OF SEQUENCES: 263
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORGAN & FINNEGAN
; STREET: 345 PARK AVENUE
; CITY: NEW YORK
; STATE: NEW YORK
; COUNTRY: USA
; ZIP: 10154
; COMPUTER READABLE FORM:
; MEDIUM TYPE: FLOPPY DISK
; COMPUTER: IBM PC COMPATIBLE
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: WORDPERFECT 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/290,665A
; FILING DATE: 15-AUG-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: RICHARD W. BORK
; REGISTRATION NUMBER: 36,459
; REFERENCE/DOCKET NUMBER: 2026-4116
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 758-4800
; TELEFAX: (212) 751-6849
; TELEX: 421792
; INFORMATION FOR SEQ ID NO: 136:

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;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S52
US-08-290-665A-136

  Query Match            75.2%;  Score 259.4;  DB 2;  Length 573;
  Best Local Similarity  86.4%;  Pred. No. 2.3e-64;
  Matches  298;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
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Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||| || ||||| |||||||||||||||| |||||| | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| |  |||||||||||  ||   ||| || ||||| || ||||| || ||||||  |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | || || || ||||||| |||||| || | ||| ||| ||||||||||||||||||||
Db        181 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| |||||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || |||||||||||| |||||||||| |||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGGAGG 345


RESULT 4
US-09-194-949A-5
; Sequence 5, Application US/09194949A
; Patent No. 6653125
; GENERAL INFORMATION:
;  APPLICANT: Merck & Co., Inc.
;  APPLICANT:  Donnelly, John J.
;  APPLICANT:  Fu, Tong-Ming
;  APPLICANT:  Liu, Margaret A.
;  APPLICANT:  Shiver, John W.
;  TITLE OF INVENTION: SYNTHETIC HEPATITIS C GENES
;  FILE REFERENCE: 19732YP
;  CURRENT APPLICATION NUMBER: US/09/194,949A
;  CURRENT FILING DATE:  2000-02-17
;  PRIOR APPLICATION NUMBER: PCT/US97/09884
;  PRIOR FILING DATE: 1997-06-06
;  PRIOR APPLICATION NUMBER: 60/020,494
;  PRIOR FILING DATE: 1996-06-11
;  PRIOR APPLICATION NUMBER: 60/033,534
;  PRIOR FILING DATE: 1996-12-20
;  PRIOR APPLICATION NUMBER: 08/865,823
;  PRIOR FILING DATE: 1997-05-30
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 573
;   TYPE: DNA
;   ORGANISM: Hepatitis C Virus
US-09-194-949A-5

  Query Match            75.2%;  Score 259.4;  DB 4;  Length 573;
  Best Local Similarity  86.4%;  Pred. No. 2.3e-64;
  Matches  298;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||   |||||||| |||||||||||||| | |||||||||| ||| ||||||
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||| |||||||| |||| |||||||||||||||||||||||| || | || ||||||
Db         61 GACGTCAAGTTCCCGGGCGGTGGTCAGATCGTTGGTGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||     | |||||||||||||||||||||||  |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTAGGAAGACTTCCGAGCGGTCGCAACCTCGTGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| || || ||||||| ||| |||||  |||||||||||||||||||||||||||||
Db        181 AGGCGACAGCCTATCCCCAAGGCTCGCCGGCCCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| |||||||||| |||||||||||| ||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGCAATGAGGGCTTCGGGTGGGCAGGATGGCTCCTGTCCCCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||| ||    |||||||| | |||||||||||| |||
Db        301 CGCGGCTCTCGGCCTAGTTGGGGCCCCACTGACCCCCGGCGTAGG 345


RESULT 5
PCT-US95-10398-136
; Sequence 136, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  136:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
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;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S52
PCT-US95-10398-136

  Query Match             75.2%;  Score 259.4;  DB 5;  Length 573;
  Best Local Similarity   86.4%;  Pred. No. 2.3e-64;
  Matches  298;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||| || ||||| |||||||||||||||| |||||| | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  |  |||||||||||  ||   ||| || ||||| || |||||| || ||||||  |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | || || || ||||||| |||||| || | ||| ||| |||||||||||||||||||||
Db        181 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| ||||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || |||||||||||| |||||||||| |||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGGAGG 345


RESULT 6
US-08-290-665A-141
; Sequence 141, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  141:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z1
US-08-290-665A-141

  Query Match             74.7%;  Score 257.8;  DB 2;  Length 573;
  Best Local Similarity   86.1%;  Pred. No. 6.5e-64;
  Matches  297;  Conservative    0;  Mismatches   47;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              |||||||||  |||||||| |||||||||||||| | ||||||||||   ||| || | |
Db          1 ATGAGCACAAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGTCGCCCCATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              || || || ||||| |||||||| |||||||||| ||||||||| |||| || ||||||
Db         61 GATGTGAAATTCCCGGGCGGCGGCCAGATCGTTGGCGGAGTTTACTTGCTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||| |||||||||||| |||| || |||||||| |||||||| |||||||  |
Db        121 GGCCCCCGGTTGGGTGTGCGCGCAGCTCGGAAGACTTCGGAGCGGTCACAACCTCGTGGC 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||  || || ||||||| |||||||| |||||||||||||||||||||||||||||
Db        181 AGGCGTCAGCCTATCCCCAAGGCGCGCCGGTCCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| || || |||||||||| |||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||  ||  | |||||  |||||||| |||||  |||||||| |||
Db        301 CGCGGTTCCAGGCCGTCTTGGGGCCCCAATGATCCCCGGCGTAGG 345


RESULT 7
PCT-US95-10398-141
; Sequence 141, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
```

```
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  141:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  Z1
PCT-US95-10398-141

  Query Match             74.7%;  Score 257.8;  DB 5;  Length 573;
  Best Local Similarity   86.1%;  Pred. No. 6.5e-64;
  Matches  297;  Conservative    0;  Mismatches   47;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              |||||||||  |||||||| |||||||||||||| | |||||||||    ||| || | 
Db          1 ATGAGCACAAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGTCGCCCCATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              || || || ||||| |||||||| |||||||||| ||||||||| |||| || ||||||
Db         61 GATGTGAAATTCCCGGGCGGCGGCCAGATCGTTGGCGGAGTTTACTTGCTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
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Db        121 GGCCCCCGGTTGGGTGTGCGCGCAGCTCGGAAGACTTCGGAGCGGTCACAACCTCGTGGC 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| || || ||||||| |||||||||  ||||||||||||||||||||||||||||| 
Db        181 AGGCGTCAGCCTATCCCCAAGGCGCGCCGGTCCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| || || |||||||||| |||||||||||||||||||||||||||| 
Db        241 TACCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
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Db        301 CGCGGTTCCAGGCCGTCTTGGGGCCCCAATGATCCCCGGCGTAGG 345


RESULT 8
US-08-157-235-4
; Sequence 4, Application US/08157235
; Patent No. 5550016
;  GENERAL INFORMATION:
;    APPLICANT:  OKAMOTO, Hiroaki
;    TITLE OF INVENTION:  OLIGONUCLEOTIDES OF HCV, PRIMERS AND
;    TITLE OF INVENTION:  PROBES THEREFROM, METHOD OF DETERMINING HCV GENOTYPES,
;    TITLE OF INVENTION:  AND METHOD OF DETECTING HCV IN SAMPLES
;    NUMBER OF SEQUENCES:  20
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Beveridge, DeGrandi, Weilacher & Young
;      STREET:  1850 M Street N.W., Suite 800
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:
;      ZIP:  20036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/157,235
;      FILING DATE:  24-NOV-1993
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 354370/92
;      FILING DATE:  27-NOV-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Robert G. Weilacher
;      REGISTRATION NUMBER:  20,531
;      REFERENCE/DOCKET NUMBER:  06/87-49206
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-659-2811
;      TELEFAX:  202-659-1462
;      TELEX:  64470
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  803 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-157-235-4

  Query Match             74.7%;  Score 257.8;  DB 1;  Length 803;
  Best Local Similarity   86.1%;  Pred. No. 7.2e-64;
  Matches  297;  Conservative    0;  Mismatches   47;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db        298 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 357

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| || ||||| |||||||||||||||| |||||| | || ||||||
Db        358 GACGTCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 417

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| |  |||||||||| ||   ||| || ||||| || ||||| || |||||| | 
Db        418 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 477

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | || || || ||||||| |||||| || | ||| ||| ||||||||||||||||||||| 
Db        478 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 537

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| || ||||||||||||||||||||||||||||||||||| 
Db        538 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 597

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || |||||||||||||||||||||||||| ||| 
Db        598 CGCGGCTCCCGTCCATCCTGGGGCCCAAATGACCCCCGGCGGAGG 642


RESULT 9
US-08-157-235-5
; Sequence 5, Application US/08157235
; Patent No. 5550016
;  GENERAL INFORMATION:
;    APPLICANT:  OKAMOTO, Hiroaki
;    TITLE OF INVENTION:  OLIGONUCLEOTIDES OF HCV, PRIMERS AND
;    TITLE OF INVENTION:  PROBES THEREFROM, METHOD OF DETERMINING HCV GENOTYPES,
;    TITLE OF INVENTION:  AND METHOD OF DETECTING HCV IN SAMPLES
;    NUMBER OF SEQUENCES:  20
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Beveridge, DeGrandi, Weilacher & Young
;      STREET:  1850 M Street N.W., Suite 800
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:
;      ZIP:  20036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/157,235
;      FILING DATE:  24-NOV-1993
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;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 354370/92
;      FILING DATE:  27-NOV-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Robert G. Weilacher
;      REGISTRATION NUMBER:  20,531
;      REFERENCE/DOCKET NUMBER:  06/87-49206
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-659-2811
;      TELEFAX:  202-659-1462
;      TELEX:  64470
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  803 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-157-235-5

  Query Match             74.7%;  Score 257.8;  DB 1;  Length 803;
  Best Local Similarity   86.1%;  Pred. No. 7.2e-64;
  Matches  297;  Conservative    0;  Mismatches   47;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db        298 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 357

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| || ||||| |||||||||||||||| |||||| | || ||||||
Db        358 GACGTCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 417

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| |  |||||||||| ||   ||| || ||||| || ||||| || |||||| |
Db        418 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 477

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | || || || ||||||| |||||| || | ||| ||| |||||||||||||||||||
Db        478 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 537

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||| ||||| || |||||||||||||||||||| ||||||||||||||
Db        538 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGATGGCTCCTGTCCCCG 597

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || |||||||||||||||||||||| |||
Db        598 CGCGGCTCCCGTCCATCATGGGGCCCAAATGACCCCCGGCGGAGG 642


RESULT 10
US-08-290-665A-135
; Sequence 135, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  135:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  HK10
US-08-290-665A-135

  Query Match             74.3%;  Score 256.2;  DB 2;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||| || ||||| |||||||||||||||| |||||| | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| |  |||||||||| ||   ||| || ||||| || |||||||| |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCGCAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | || || || ||||||| |||||| || | ||| ||| |||||||||||||||||||
Db        181 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| || |||||||||||||||||||| ||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGATGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || |||||||||||| ||||||||||  ||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGACGG 345


RESULT 11
US-08-290-665A-137
; Sequence 137, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
```

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;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  137:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
US-08-290-665A-137

  Query Match             74.3%;  Score 256.2;  DB 2;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||| | |||||||| || ||||| |||||||||||||||||| |||||| | || |||||||
Db         61 GACATCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| |  |||||||||| ||   ||| || ||||| || ||||| || |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||| || || ||||||| |||||| || | ||| ||| | ||||||||||||||||||
Db        181 CGGCGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGATCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| || ||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || ||||||||||||||||||||||| |||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAATGACCCCCGGCGGAGG 345


RESULT 12
US-08-290-665A-138
; Sequence 138, Application US/08290665A
; Patent No. 5882852
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/290,665A
;      FILING DATE:  15-AUG-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  138:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  DK12
US-08-290-665A-138

  Query Match             74.3%;  Score 256.2;  DB 2;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| || ||||| |||||||||||||||||| |||||| | || |||||||
Db         61 GACGTCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| |  |||||||||| ||   ||| || ||||| || ||||| || |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||| || || ||||||| |||||| || | ||| ||| | ||||||||||||||||||
Db        181 CGGCGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCTGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| || ||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || ||||||||||| |||||||||| |||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGGAGG 345


RESULT 13
PCT-US95-10398-135
; Sequence 135, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
```

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;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  135:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  HK10
PCT-US95-10398-135

  Query Match             74.3%;  Score 256.2;  DB 5;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||| || ||||| |||||||||||||||| |||||| | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  | |||||||||| ||   ||| || ||||| || |||||||| |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCGCAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              | || || || ||||||| |||||| || | ||| ||| ||||||||||||||||||||
Db        181 CGACGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| || ||||||||||||||||||||| ||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGATGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || || || |||||||||| ||||||||||  ||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGACGG 345


RESULT 14
PCT-US95-10398-137
; Sequence 137, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  137:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  S2
PCT-US95-10398-137

  Query Match             74.3%;  Score 256.2;  DB 5;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||| | |||||||| || ||||| |||||||||||||||| |||||| | || ||||||
Db         61 GACATCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| |  |||||||||| ||   ||| || ||||| || |||||||| |||||| |
Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||| || || |||||| || | ||| ||| ||||||||||||||||||||
Db        181 CGGCGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGATCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| || ||||||||||||||||||||| ||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300
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Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||||||  ||  ||  ||||||||||||||||||||||||| |||
Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAATGACCCCCGGCGGAGG 345


RESULT 15
PCT-US95-10398-138
; Sequence 138, Application PC/TUS9510398
;  GENERAL INFORMATION:
;    APPLICANT:  BUKH, J., MILLER, R.H. AND
;    APPLICANT:  PURCELL, R.H.
;    TITLE OF INVENTION:  NUCLEOTIDE AND DEDUCED
;    TITLE OF INVENTION:  AMINO ACID SEQUENCES OF THE ENVELOPE 1 AND
;    TITLE OF INVENTION:  CORE GENES OF ISOLATES OF HEPATITIS C VIRUS
;    TITLE OF INVENTION:  AND THE USE OF REAGENTS DERIVED FROM THESE
;    TITLE OF INVENTION:  SEQUENCES IN DIAGNOSTIC METHODS AND VACCINES
;    NUMBER OF SEQUENCES:  263
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MORGAN & FINNEGAN
;      STREET:  345 PARK AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10154
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  FLOPPY DISK
;      COMPUTER:  IBM PC COMPATIBLE
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  WORDPERFECT 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/10398
;      FILING DATE:  15-AUG-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/086,428
;      FILING DATE:  29 JUNE 1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/290/665
;      FILING DATE:  15 AUGUST 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  RICHARD W. BORK
;      REGISTRATION NUMBER:  36,459
;      REFERENCE/DOCKET NUMBER:  2026-4116
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 758-4800
;      TELEFAX:  (212) 751-6849
;      TELEX:  421792
;  INFORMATION FOR SEQ ID NO:  138:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  573 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ORIGINAL SOURCE:
;      ORGANISM:  homosapiens
;      INDIVIDUAL ISOLATE:  DK12
PCT-US95-10398-138

  Query Match             74.3%;  Score 256.2;  DB 5;  Length 573;
  Best Local Similarity   85.8%;  Pred. No. 1.8e-63;
  Matches  296;  Conservative    0;  Mismatches   48;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              |||||||||||||||||||| |||||||||||||||||||||||||| ||  || ||||||
Db          1 ATGAGCACACTTCCTAAACCTCAAAGAAAAACCAAAAGAAACACCATCCGTCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| || ||||| |||||||||||||||| |||||| | || ||||||
Db         61 GACGTCAAGTTCCCGGGTGGCGGACAGATCGTTGGTGGAGTATACGTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||| |  |||||||||| ||   ||| || ||||| || ||||| || |||||| |

Db        121 GGCCCACGATTGGGTGTGCGCGCGACGCGTAAAACTTCTGAACGGTCACAGCCTCGCGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||| || || ||||||| |||||| || | ||| ||| ||||||||||||||| |||
Db        181 CGGCGACAGCCTATCCCCAAGGCGCGTCGGAGCGAAGGCCGGTCCTGGGCTCAGCCTGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| || ||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCA 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
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Db        301 CGCGGCTCCCGTCCATCTTGGGGCCCAAACGACCCCCGGCGGAGG 345


Search completed: February 27, 2004, 11:14:05
Job time : 82 secs
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GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 27, 2004, 11:01:46 ; Search time 261 Seconds
(without alignments)
4768.491 Million cell updates/sec

Title: US-09-873-224A-147
Perfect score: 345
Sequence: 1 atgagcacacttcctaaacc.....aaatgacccccggcgcagga 345

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2353733 seqs, 1803733377 residues

Total number of hits satisfying chosen parameters: 4707466

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/2/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq:*
14: /cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
15: /cgn2_6/ptodata/2/pubpna/US10C_PUBCOMB.seq:*
16: /cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	334	96.8	346	10	US-09-899-046-147	Sequence 147, App
2	334	96.8	346	10	US-09-878-281-147	Sequence 147, App
3	309	89.6	309	9	US-09-851-138-49	Sequence 49, Appl
4	261.6	75.8	652	9	US-09-851-138-59	Sequence 59, Appl
5	260.2	75.4	499	10	US-09-899-046-165	Sequence 165, App
6	260.2	75.4	499	10	US-09-878-281-165	Sequence 165, App
7	259.4	75.2	573	10	US-09-194-949-5	Sequence 5, Appli
8	254.6	73.8	499	10	US-09-899-046-163	Sequence 163, App
9	254.6	73.8	499	10	US-09-878-281-163	Sequence 163, App
10	253.6	73.5	498	10	US-09-899-046-193	Sequence 193, App
11	253.6	73.5	498	10	US-09-878-281-193	Sequence 193, App
12	253	73.3	2433	9	US-09-973-025-49	Sequence 49, Appl
13	253	73.3	2433	10	US-09-899-303-49	Sequence 49, Appl
14	253	73.3	2433	10	US-09-995-808-49	Sequence 49, Appl
15	253	73.3	2433	10	US-09-995-860-49	Sequence 49, Appl
16	253	73.3	2433	10	US-09-995-791-49	Sequence 49, Appl
17	249.8	72.4	9413	10	US-09-827-688-6	Sequence 6, Appli
18	248.8	72.1	957	9	US-09-851-138-11	Sequence 11, Appl
19	248.2	71.9	480	14	US-10-071-867-15	Sequence 15, Appl
20	248.2	71.9	9275	14	US-10-259-275-39	Sequence 39, Appl
21	246.6	71.5	685	10	US-09-853-409-37	Sequence 37, Appl
22	246.6	71.5	685	12	US-10-457-304-37	Sequence 37, Appl
23	246.6	71.5	708	15	US-10-365-620-57	Sequence 57, Appl
24	246.6	71.5	750	15	US-10-365-620-53	Sequence 53, Appl
25	246.6	71.5	1380	15	US-10-365-620-59	Sequence 59, Appl
26	246.6	71.5	1422	15	US-10-365-620-55	Sequence 55, Appl
27	246.6	71.5	9365	10	US-09-827-688-7	Sequence 7, Appli
28	246.6	71.5	9416	9	US-09-929-955-13	Sequence 13, Appl
29	246.6	71.5	9416	13	US-10-104-966-13	Sequence 13, Appl
30	246.6	71.5	9646	9	US-09-742-659-3	Sequence 3, Appli
31	246.6	71.5	9646	9	US-09-238-076-1	Sequence 1, Appli
32	246.6	71.5	9646	10	US-09-995-937-1	Sequence 1, Appli
33	246.6	71.5	9646	10	US-09-917-563-1	Sequence 1, Appli
34	246.6	71.5	10803	9	US-09-747-419-17	Sequence 17, Appl
35	246.6	71.5	10803	14	US-10-259-275-17	Sequence 17, Appl
36	246.6	71.5	12980	9	US-09-238-076-5	Sequence 5, Appli
37	246.6	71.5	12980	10	US-09-995-937-5	Sequence 5, Appli
38	246.6	71.5	12980	10	US-09-917-563-5	Sequence 5, Appli
39	245	71.0	540	15	US-10-150-283-2	Sequence 2, Appli
40	245	71.0	9379	9	US-09-916-359-1	Sequence 1, Appli
41	245	71.0	9416	9	US-09-238-076-19	Sequence 19, Appl
42	245	71.0	9416	10	US-09-995-937-19	Sequence 19, Appl
43	245	71.0	9416	10	US-09-917-563-19	Sequence 19, Appl
44	243.4	70.6	630	9	US-09-973-322-1	Sequence 1, Appli
45	243.4	70.6	630	10	US-09-968-255-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-899-046-147
; Sequence 147, Application US/09899046
; Publication No. US20030008274A1
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: New sequences of hepatitis C virus
; TITLE OF INVENTION: genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/899,046
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/362,455
; FILING DATE:
; INFORMATION FOR SEQ ID NO: 147:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 346 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..346
; FEATURE:
; NAME/KEY: mat_peptide
; LOCATION: 1..342
US-09-899-046-147

Query Match 96.8%; Score 334; DB 10; Length 346;

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  Best Local Similarity   99.7%;  Pred. No. 2.7e-91;
  Matches  345;  Conservative    0;  Mismatches    0;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCSCCGGCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
              |||||||||||||||||||||||||||||||||||||||||||||
Db        301 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 346


RESULT 2
US-09-878-281-147
; Sequence 147, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  147:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  346 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..346
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..342
US-09-878-281-147

  Query Match             96.8%;  Score 334;  DB 10;  Length 346;
  Best Local Similarity   99.7%;  Pred. No. 2.7e-91;
  Matches  345;  Conservative    0;  Mismatches    0;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCSCCGGCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 345
              |||||||||||||||||||||||||||||||||||||||||||||
Db        301 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGGA 346


RESULT 3
US-09-851-138-49
; Sequence 49, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTI
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 49:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 309 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: cDNA
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        SEQUENCE DESCRIPTION: SEQ ID NO: 49:
US-09-851-138-49

  Query Match             89.6%;  Score 309;  DB 9;  Length 309;
  Best Local Similarity   100.0%;  Pred. No. 9.8e-84;
  Matches  309;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
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Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACAGG 60

Qy         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGGG 120

Qy        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 GCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGTA 180

Qy        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 GGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGGT 240

Qy        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 ACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCGC 300

Qy        301 GCGGCTCTC 309
              |||||||||
Db        301 GCGGCTCTC 309


RESULT 4
US-09-851-138-59
; Sequence 59, Application US/09851138
; Publication No. US20020183508A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   STUYVER, LIEVEN
;        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
;                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND DIAGNOSTIC
;                            AGENTS
;        NUMBER OF SEQUENCES: 207
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: ARNOLD, WHITE & DURKEE
;             STREET: P.O. BOX 4433
;             CITY: HOUSTON
;             STATE: TEXAS
;             COUNTRY: USA
;             ZIP: 77210-4433
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: Microsoft Word 6.0 / ASCII text output
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/851,138
;             FILING DATE: 09-May-2001
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/836,075
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: EP 94870166.9
;             FILING DATE: 21 Oct 1994
;             APPLICATION NUMBER: EP 95870076.7
;             FILING DATE: 28 Jun 1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: KAMMERER, PATRICIA A.
;             REGISTRATION NUMBER: 29,775
;             REFERENCE/DOCKET NUMBER: INNS:004
;   INFORMATION FOR SEQ ID NO: 59:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 652 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: cDNA
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        SEQUENCE DESCRIPTION: SEQ ID NO: 59:

US-09-851-138-59

  Query Match             75.8%;  Score 261.6;  DB 9;  Length 652;
  Best Local Similarity   86.7%;  Pred. No. 2.4e-69;
  Matches  299;  Conservative    0;  Mismatches   45;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||  |||||||| |||||||||||||||||||||||||||| ||| ||||||
Db        239 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAAAGAAACACCAACCGCCGCCCACAG 298

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| || ||||||||||||||||| |||||||||| ||||||
Db        299 GACGTCAAGTTCCCGGGCGGTGGCCAGATCGTTGGTGGAGTCTACGTGCTACCGCGCAGG 358

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||    |||||||||| |||| ||| |||||||| |||||||||||||||||  |
Db        359 GGCCCTAGATTGGGTGTGCGCGCAGCGCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 418

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| || |||| || ||||||| |||||||||||||||||||| |||||||||
Db        419 AGGCGCCAACCTATTCCCAAGGAGCGCCGACCCGAGGGCAGGTCCTGGGCGCAGCCCGGG 478

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||| |||||||| ||||| || ||||||||||||||||||  ||||||||||||
Db        479 TACCCCTGGCCCCTCTATGGTAACGAGGGCTGCGGGTGGGCAGGTNGGCTCCTGTCCCCT 538

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||| || ||    ||||| || | |||||||||||| |||
Db        539 CGCGGCTCCCGTCCTAGTTGGGGTCCTACTGACCCCCGGCGTAGG 583


RESULT 5
US-09-899-046-165
; Sequence 165, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  165:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  499 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-899-046-165

  Query Match             75.4%;  Score 260.2;  DB 10;  Length 499;
  Best Local Similarity   86.3%;  Pred. No. 6.2e-69;
  Matches  297;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||  |||||||| |||||||||||||| | |||||||||| | |||  | |
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCTATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||||||| |||||||||||| ||||||||| || | || ||||||
Db         61 GACGTTAAGTTCCCAGGCGGTGGTCAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120
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Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  ||||||||||| ||    || |||||||| ||||||||||||||||||   |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||||  ||||||| ||||||||||||||||||||| |||||||| |||||||||
Db        181 AGGCGCCAACCTATCCCCAAGGCGCGCCGAACCGAGGGCAGATCCTGGGCGCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              || |||||||||| || || |||||||||| |||||||||||||||||||||||||||||
Db        241 TATCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAG 343
              ||||| |||||  |||| |||||||| ||||| |||||| | ||
Db        301 CGCGGNTCTCGGNCGTCTTGGGGCCCCAATGATCCCCGGNGGAG 344


RESULT 6
US-09-878-281-165
; Sequence 165, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  165:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  499 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-878-281-165

  Query Match             75.4%;  Score 260.2;  DB 10;  Length 499;
  Best Local Similarity   86.3%;  Pred. No. 6.2e-69;
  Matches  297;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||   ||||||||| |||||||||||||| | |||||||||| | |||  | |
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCTATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||||||| |||||||||||| |||||||| || | || ||||||
Db         61 GACGTTAAGTTCCCAGGCGGTGGTCAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||    || |||||||| ||||||||||||||||||   |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||||  ||||||| ||||||||||||||||||||| |||||||| |||||||||
Db        181 AGGCGCCAACCTATCCCCAAGGCGCGCCGAACCGAGGGCAGATCCTGGGCGCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              || |||||||||| || || |||||||||| |||||||||||||||||||||||||||||
Db        241 TATCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAG 343
              ||||| |||||  |||| |||||||| ||||| |||||| | ||
Db        301 CGCGGNTCTCGGNCGTCTTGGGGCCCCAATGATCCCCGGNGGAG 344


RESULT 7
US-09-194-949-5
; Sequence 5, Application US/09194949
; Publication No. US20030053987A1
; GENERAL INFORMATION:
;  APPLICANT:  Merck & Co., Inc.
;  APPLICANT:  Donnelly, John J.
;  APPLICANT:  Fu, Tong-Ming
;  APPLICANT:  Liu, Margaret A.
;  APPLICANT:  Shiver, John W.
;  TITLE OF INVENTION:  SYNTHETIC HEPATITIS C GENES
;  FILE REFERENCE:  19732YP
;  CURRENT APPLICATION NUMBER: US/09/194,949
;  CURRENT FILING DATE:  2000-02-17
;  PRIOR APPLICATION NUMBER:  PCT/US97/09884
;  PRIOR FILING DATE:  1997-06-06
;  PRIOR APPLICATION NUMBER:  60/020,494
;  PRIOR FILING DATE:  1996-06-11
;  PRIOR APPLICATION NUMBER:  60/033,534
;  PRIOR FILING DATE:  1996-12-20
;  NUMBER OF SEQ ID NOS:  25
;  SOFTWARE:  FastSEQ for Windows Version 4.0
; SEQ ID NO 5
;   LENGTH: 573
;   TYPE: DNA
;   ORGANISM: Hepatitis C Virus
US-09-194-949-5

  Query Match             75.2%;  Score 259.4;  DB 10;  Length 573;
  Best Local Similarity   86.4%;  Pred. No. 1.1e-68;
  Matches  298;  Conservative    0;  Mismatches   46;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||   ||||||||| |||||||||||||| | |||||||||| ||| ||||||
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| |||||||||||||||||||||||| || | || ||||||
Db         61 GACGTCAAGTTCCCGGGCGGTGGTCAGATCGTTGGTGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||      | |||||||||||||||||||||||||   |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTAGGAAGACTTCCGAGCGGTCGCAACCTCGTGGA 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| || || ||||||| ||| |||||  |||||||||||||||||||||||||||||
Db        181 AGGCGACAGCCTATCCCCAAGGCTCGCCGGCCCGAGGGCAGGTCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| |||||||||| |||||||||||| ||||||||||||||
Db        241 TACCCTTGGCCCCTCTATGGCAATGAGGGCTTCGGGTGGGCAGGATGGCTCCTGTCCCCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||| ||    |||||||| | |||||||||||| |||
Db        301 CGCGGCTCTCGGCCTAGTTGGGGCCCCACTGACCCCCGGCGTAGG 345


RESULT 8
US-09-899-046-163
; Sequence 163, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
```

```
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/899,046
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;   INFORMATION FOR SEQ ID NO:  163:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  499 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  1..499
;     FEATURE:
;       NAME/KEY:  mat_peptide
;       LOCATION:  1..496
US-09-899-046-163

  Query Match             73.8%;  Score 254.6;  DB 10;  Length 499;
  Best Local Similarity   85.5%;  Pred. No. 3.1e-67;
  Matches  295;  Conservative    0;  Mismatches   49;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              |||||||| |||||||| |||||||||||||| | |||||||||| | ||| || | 
Db          1 ATGAGCACGAATCCTAAACTTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCCATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||| || || || |||||||||| |||||||| || | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGTGGCCAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  |||||||||||| ||    || |||||||| ||||||||||||||||  |
Db        121 GGCCCTAGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| ||||||| |||||||||| |||||||| |||||||| |||||||||
Db        181 AGGCGCCAACCTATCCCCAAGGCGCGCCGATCCGAGGGCAGATCCTGGGCGCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              || |||||||||| || || |||||||||| ||||||||||||||||||||||||||||
Db        241 TATCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||| ||||| ||||| |||||||| ||||| |||||||| |||
Db        301 CGCGGGTCTCGGCCGTCTTGGGGCCCTAATGATCCCCGGCGGAGG 345


RESULT 9
US-09-878-281-163
; Sequence 163, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  163:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  499 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..499
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..496
US-09-878-281-163

  Query Match             73.8%;  Score 254.6;  DB 10;  Length 499;
  Best Local Similarity   85.5%;  Pred. No. 3.1e-67;
  Matches  295;  Conservative    0;  Mismatches   49;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              |||||||| |||||||| |||||||||||||| | |||||||||| | ||| || | 
Db          1 ATGAGCACGAATCCTAAACTTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCCATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              |||||||||||||| || || || |||||||||| |||||||| || | || ||||||
Db         61 GACGTTAAGTTCCCGGGTGGTGGCCAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              |||||  |||||||||||| ||    || |||||||| ||||||||||||||||  |
Db        121 GGCCCTAGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              |||||||||| ||||||| |||||||||| |||||||| |||||||| |||||||||
Db        181 AGGCGCCAACCTATCCCCAAGGCGCGCCGATCCGAGGGCAGATCCTGGGCGCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              || |||||||||| || || |||||||||| ||||||||||||||||||||||||||||
Db        241 TATCCTTGGCCCCTTTACGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCCCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              ||||| ||||| ||||| |||||||| ||||| |||||||| |||
Db        301 CGCGGGTCTCGGCCGTCTTGGGGCCCTAATGATCCCCGGCGGAGG 345


RESULT 10
US-09-899-046-193
; Sequence 193, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  193:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  498 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
```

```
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..498
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..495
US-09-899-046-193

  Query Match             73.5%;  Score 253.6;  DB 10;  Length 498;
  Best Local Similarity   85.5%;  Pred. No. 6.1e-67;
  Matches  294;  Conservative    0;  Mismatches   49;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||   |||||||| |||||||||||||||| | |||||||||| | |||  | |
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCTATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| || |||||||||| |||||||| || | || ||||||
Db         61 GACGTAAAGTTCCCGGGCGGTGGACAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||| |||||||||| ||    || |||||||| |||||||||||||||||  |
Db        121 GGCCCCCGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGC 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| ||||| ||||||| |||||||||  |||||||||||||||||||| ||  |||||
Db        181 AGGCGTCAACCTATCCCCAAGGCGCGCCGGTCCGAGGGCAGGTCCTGGGCGCAAGCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||| |||||||| ||||| |||||||||| |||||||||||||||||||||||||| ||
Db        241 TACCCCTGGCCCCTCTATGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCTCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAG 343
              |||||||||| || || |||||||||||||| |||||||| ||
Db        301 CGCGGCTCTCGGCCATCTTGGGGCCCAAATGATCCCCGGCGGAG 344


RESULT 11
US-09-878-281-193
; Sequence 193, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  193:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  498 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..498
;    FEATURE:
;      NAME/KEY:  mat_peptide
;      LOCATION:  1..495
US-09-878-281-193

  Query Match             73.5%;  Score 253.6;  DB 10;  Length 498;
  Best Local Similarity   85.5%;  Pred. No. 6.1e-67;
  Matches  294;  Conservative    0;  Mismatches   49;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACCCCGGCCACA-G 59
              ||||||||   |||||||| |||||||||||||||| | |||||||||| | |||  | |
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCTATG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| || |||||||||| |||||||| || | || ||||||
Db         61 GACGTAAAGTTCCCGGGCGGTGGACAGATCGTTGGCGGAGTTTACTTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||| |||||||||| ||    || |||||||| |||||||||||||||||  |
Db        121 GGCCCCCGGTTGGGTGTGCGCGCGACTCGGAAGACTTCGGAGCGGTCGCAACCTCGTGGC 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| ||||| ||||||| |||||||||  |||||||||||||||||||| ||  |||||
Db        181 AGGCGTCAACCTATCCCCAAGGCGCGCCGGTCCGAGGGCAGGTCCTGGGCGCAAGCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||| |||||||| ||||| |||||||||| |||||||||||||||||||||||||| ||
Db        241 TACCCCTGGCCCCTCTATGGCAATGAGGGCTGTGGGTGGGCAGGGTGGCTCCTGTCTCCT 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAG 343
              |||||||||| || || |||||||||||||| |||||||| ||
Db        301 CGCGGCTCTCGGCCATCTTGGGGCCCAAATGATCCCCGGCGGAG 344


RESULT 12
US-09-973-025-49
; Sequence 49, Application US/09973025
; Publication No. US20020182706A1
;   GENERAL INFORMATION:
;        APPLICANT: MAERTENS, GEERT
;                   BOSMAN, FONS
;                   DE MARTYNOFF, GUY
;                   BUYSE, MARIE-ANGE
;        TITLE OF INVENTION: PURIFIED HEPATITIS C VIRUS ENVELOPE
;                            PROTEINS FOR DIAGNOSTIC AND THERAPEUTIC USE
;        NUMBER OF SEQUENCES: 111
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: NIXON & VANDERHYE P.C.
;             STREET: 1100 NORTH GLEBE ROAD
;             CITY: ARLINGTON
;             STATE: VIRGINIA
;             COUNTRY: U.S.A.
;             ZIP: 22201-4714
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/973,025
;             FILING DATE: 10-Oct-2001
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US 08/612,973
;             FILING DATE: 11-MAR-1996
;        ATTORNEY/AGENT INFORMATION:
;             NAME: BYRNE, THOMAS E.
;             REGISTRATION NUMBER: 32,205
;             REFERENCE/DOCKET NUMBER: 1487-10
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (703) 816-4000
;             TELEFAX: (703) 816-4100
;   INFORMATION FOR SEQ ID NO: 49:
```

```
;         SEQUENCE CHARACTERISTICS:
;              LENGTH: 2433 base pairs
;              TYPE: nucleic acid
;              STRANDEDNESS: single
;              TOPOLOGY: linear
;         MOLECULE TYPE: cDNA
;         HYPOTHETICAL: NO
;         ANTI-SENSE: NO
;         FEATURE:
;              NAME/KEY:  CDS
;              LOCATION:  1..2430
;         FEATURE:
;              NAME/KEY:  mat_peptide
;              LOCATION:  1..2427
;         SEQUENCE DESCRIPTION: SEQ ID NO: 49:
US-09-973-025-49

  Query Match             73.3%;  Score 253;  DB 9;  Length 2433;
  Best Local Similarity   85.2%;  Pred. No. 1.2e-66;
  Matches  294;  Conservative    0;  Mismatches   50;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||  |||||||||| |||||||||||||| | ||||||||||| ||| ||||||
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| |||||||||||||||||||||||| || | || ||||||
Db         61 GACGTCAAGTTCCCGGGCGGTGGTCAGATCGTTGGTGGAGTTTACCTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||      | |||||||||||||||||||||||||  |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTAGGAAGACTTCCGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| ||||| ||||||| ||| |||||| ||||||| ||| ||||||||||||||||
Db        181 AGGCGACAACCTATCCCCAAGGCTCGCCGACCCGAGGGTAGGGCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| |||||||||    |||||||||| |||||||||| ||
Db        241 TACCCTTGGCCCCTCTATGGCAATGAGGGCATGGGGTGGGCAGGATGGCTCCTGTCACCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||| ||    |||||||| |  |||||||||| |||
Db        301 CGCGGCTCTCGGCCTAGTTGGGGCCCTACAGACCCCCGGCGTAGG 345


RESULT 13
US-09-899-303-49
; Sequence 49, Application US/09899303
; Publication No. US20030036110A1
;   GENERAL INFORMATION:
;         APPLICANT: MAERTENS, GEERT
;                    BOSMAN, FONS
;                    DE MARTYNOFF, GUY
;                    BUYSE, MARIE-ANGE
;         TITLE OF INVENTION: PURIFIED HEPATITIS C VIRUS ENVELOPE
;                             PROTEINS FOR DIAGNOSTIC AND THERAPEUTIC USE
;         NUMBER OF SEQUENCES: 111
;         CORRESPONDENCE ADDRESS:
;              ADDRESSEE: NIXON & VANDERHYE P.C.
;              STREET: 1100 NORTH GLEBE ROAD
;              CITY: ARLINGTON
;              STATE: VIRGINIA
;              COUNTRY: U.S.A.
;              ZIP: 22201-4714
;         COMPUTER READABLE FORM:
;              MEDIUM TYPE: Floppy disk
;              COMPUTER: IBM PC compatible
;              OPERATING SYSTEM: PC-DOS/MS-DOS
;              SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
;         CURRENT APPLICATION DATA:
;              APPLICATION NUMBER: US/09/899,303
;              FILING DATE: 06-Jul-2001
;              CLASSIFICATION: <Unknown>
;         PRIOR APPLICATION DATA:
;              APPLICATION NUMBER: US 08/612,973
;              FILING DATE: 11-MAR-1996
;         ATTORNEY/AGENT INFORMATION:
;              NAME: BYRNE, THOMAS E.
;              REGISTRATION NUMBER: 32,205
;              REFERENCE/DOCKET NUMBER: 1487-10
;         TELECOMMUNICATION INFORMATION:
;              TELEPHONE: (703) 816-4000
;              TELEFAX: (703) 816-4100
;    INFORMATION FOR SEQ ID NO: 49:
;         SEQUENCE CHARACTERISTICS:
;              LENGTH: 2433 base pairs
;              TYPE: nucleic acid
;              STRANDEDNESS: single
;              TOPOLOGY: linear
;         MOLECULE TYPE: cDNA
;         HYPOTHETICAL: NO
;         ANTI-SENSE: NO
;         FEATURE:
;              NAME/KEY:  CDS
;              LOCATION:  1..2430
;         FEATURE:
;              NAME/KEY:  mat_peptide
;              LOCATION:  1..2427
;         SEQUENCE DESCRIPTION: SEQ ID NO: 49:
US-09-899-303-49

  Query Match             73.3%;  Score 253;  DB 10;  Length 2433;
  Best Local Similarity   85.2%;  Pred. No. 1.2e-66;
  Matches  294;  Conservative    0;  Mismatches   50;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||  |||||||||| |||||||||||||| | ||||||||||| ||| ||||||
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| |||||||||||||||||||||||| || | || ||||||
Db         61 GACGTCAAGTTCCCGGGCGGTGGTCAGATCGTTGGTGGAGTTTACCTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||      | |||||||||||||||||||||||||  |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTAGGAAGACTTCCGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| ||||| ||||||| ||| |||||| ||||||| ||| ||||||||||||||||
Db        181 AGGCGACAACCTATCCCCAAGGCTCGCCGACCCGAGGGTAGGGCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              |||||||||||||| ||||| |||||||||    |||||||||| |||||||||| ||
Db        241 TACCCTTGGCCCCTCTATGGCAATGAGGGCATGGGGTGGGCAGGATGGCTCCTGTCACCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||| ||    |||||||| |  |||||||||| |||
Db        301 CGCGGCTCTCGGCCTAGTTGGGGCCCTACAGACCCCCGGCGTAGG 345


RESULT 14
US-09-995-808-49
; Sequence 49, Application US/09995808
; Publication No. US20030095980A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: Purified hepatitis C virus envelope proteins for diagnostic and
;  TITLE OF INVENTION:  therapeutic use.
;  FILE REFERENCE: 2551-70
;  CURRENT APPLICATION NUMBER: US/09/995,808
;  CURRENT FILING DATE:  2001-11-29
;  NUMBER OF SEQ ID NOS: 122
;  SOFTWARE: PatentIn 3.1
; SEQ ID NO 49
;   LENGTH: 2433
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;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: 1..2430
;   FEATURE:
;   NAME/KEY: mat_peptide
;   LOCATION: 1..2427
US-09-995-808-49

  Query Match             73.3%;  Score 253;  DB 10;  Length 2433;
  Best Local Similarity   85.2%;  Pred. No. 1.2e-66;
  Matches  294;  Conservative    0;  Mismatches   50;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||   |||||||||| |||||||||||||| | |||||||||| ||| ||||||
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| |||||||||||||||||||||||| || | || ||||||
Db         61 GACGTCAAGTTCCCGGGCGGTGGTCAGATCGTTGGTGGAGTTTACCTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||     | |||||||||||||||||||||||||  |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTAGGAAGACTTCCGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| ||||| ||||||| ||| |||||| ||||||| ||| ||||||||||||||||
Db        181 AGGCGACAACCTATCCCCAAGGCTCGCCGACCCGAGGGTAGGGCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||| ||||| |||||||||   |||||||||| |||||||||| ||
Db        241 TACCCTTGGCCCCTCTATGGCAATGAGGGCATGGGGTGGGCAGGATGGCTCCTGTCACCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||| ||    |||||||| |  |||||||||| |||
Db        301 CGCGGCTCTCGGCCTAGTTGGGGCCCTACAGACCCCCGGCGTAGG 345


RESULT 15
US-09-995-860-49
; Sequence 49, Application US/09995860
; Publication No. US20030118603A1
; GENERAL INFORMATION:
;  APPLICANT: Innogenetics N.V.
;  TITLE OF INVENTION: Purified hepatitis C virus envelope proteins for diagnostic and
;  TITLE OF INVENTION:  therapeutic use.
;  FILE REFERENCE: 2551-69
;  CURRENT APPLICATION NUMBER: US/09/995,860
;  CURRENT FILING DATE:  2001-11-29
;  NUMBER OF SEQ ID NOS: 122
;  SOFTWARE: PatentIn 3.1
; SEQ ID NO 49
;   LENGTH: 2433
;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: 1..2430
;   FEATURE:
;   NAME/KEY: mat_peptide
;   LOCATION: 1..2427
US-09-995-860-49

  Query Match             73.3%;  Score 253;  DB 10;  Length 2433;
  Best Local Similarity   85.2%;  Pred. No. 1.2e-66;
  Matches  294;  Conservative    0;  Mismatches   50;  Indels    1;  Gaps    1;

Qy          1 ATGAGCACACTTCCTAAACCACAAAGAAAAACCAAAAGAAACACCAACC-CCGGCCACAG 59
              ||||||||   |||||||||| |||||||||||||| | |||||||||| ||| ||||||
Db          1 ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGCCGCCCACAG 60

Qy         60 GACGTTAAGTTCCCAGGCGGCGGTCAGATCGTTGGTGGAGTTTACGTGCTACCACGCAGG 119
              ||||| |||||||| ||||| |||||||||||||||||||||||| || | || ||||||
Db         61 GACGTCAAGTTCCCGGGCGGTGGTCAGATCGTTGGTGGAGTTTACCTGTTGCCGCGCAGG 120

Qy        120 GGCCCCCAGTTGGGTGTGCGTGCAGTGCGCAAGACTTCCGAGCGGTCGCAACCTCGCAGT 179
              ||||||  |||||||||||| ||     | |||||||||||||||||||||||||  |
Db        121 GGCCCCAGGTTGGGTGTGCGCGCGACTAGGAAGACTTCCGAGCGGTCGCAACCTCGTGGG 180

Qy        180 AGGCGCCAACCCATCCCCAGGGCGCGCCGAACCGAGGGCAGGTCCTGGGCTCAGCCCGGG 239
              ||||| ||||| ||||||| ||| |||||| ||||||| ||| ||||||||||||||||
Db        181 AGGCGACAACCTATCCCCAAGGCTCGCCGACCCGAGGGTAGGGCCTGGGCTCAGCCCGGG 240

Qy        240 TACCCTTGGCCCCTATATGGGAATGAGGGCTGCGGGTGGGCAGGGTGGCTCCTGTCCCCG 299
              ||||||||||||||| ||||| |||||||||   |||||||||| |||||||||| ||
Db        241 TACCCTTGGCCCCTCTATGGCAATGAGGGCATGGGGTGGGCAGGATGGCTCCTGTCACCC 300

Qy        300 CGCGGCTCTCGCCCGTCGTGGGGCCCAAATGACCCCCGGCGCAGG 344
              |||||||||| ||    |||||||| |  |||||||||| |||
Db        301 CGCGGCTCTCGGCCTAGTTGGGGCCCTACAGACCCCCGGCGTAGG 345


Search completed: February 27, 2004, 12:15:10
Job time : 263 secs
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